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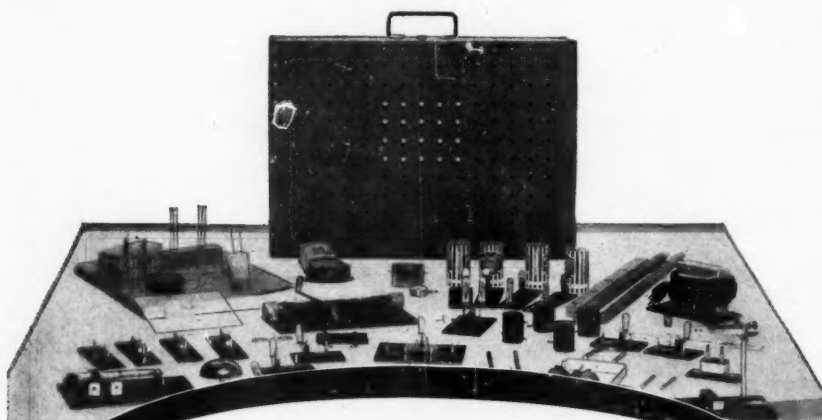
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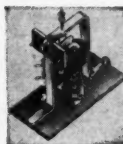


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PROPRIOCEPTIVE FACILITATION ELICITED THROUGH THE UPPER EXTREMITIES*

PART I: BACKGROUND†

A. JEAN AYRES, M.A., O.T.R.

There is a large amount of accumulated experimental data which can make a definite contribution toward more effective treatment procedures in the field of physical medicine. This data has been collected from experiments on neurophysiological mechanisms involving the neuromuscular system. The knowledge derived from these data has a direct application to therapy for those with neuromuscular disorders. One of the group of mechanisms for which importance has been established on the experimental level is proprioceptive facilitation. Proprioceptive pertains to the impulses reaching the central nervous system from endings in the muscles, tendons, joints and labyrinths. Facilitation is an increase in muscular response by means of central nervous system mechanisms. Proprioceptive facilitation, then, is an increase in muscular response obtained by stimulating proprioceptive nerve endings.

Facilitation can be elicited through receptors in different parts of the body, such as the head, neck or extremities. The tonic neck reflex is an example of facilitation through receptors located in the neck joint. This study will cover only those facilitatory techniques applicable through receptors located in the upper extremities. The first part will cover the basic neurophysiological principles involved and the pertinent experimental data. The second part of the study will review the present application of proprioceptive facilitation to therapy in general and to analyze and propose its use in occupational therapy. It is hoped that the material presented will help close the gap between knowledge gained through experimental studies done by neurophysiologists and the clinical application of that knowledge by the occupational therapist in treating the patient with a neuromuscular disability.

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NEUROPHYSIOLOGY

A symptom frequently found in neuromuscular disabilities is lack of an adequate muscular response in voluntary motion. Muscle response is usually dependent upon the central nervous system rather than upon the muscle itself. It is important, then, that we understand how the central nervous system acts to produce a better voluntary muscle response.

The proprioceptors. Located in the skeletal muscles, surrounding fascia, tendons, periosteum and joint capsules are specialized receptors, or afferent end organs, the proprioceptors. The proprioceptors send impulses to the central nervous system concerning movements and positions of the parts of the body. Although information on proprioceptors is not altogether clear, at the present time leading neurologists^{10, 1} feel that there are four main types of proprioceptive endings in the extremities. The first type is the muscle spindle. It is a fusiform (tapering at both ends) body which lies parallel to and between the muscle fibers. It consists of three to ten muscle fibers enclosed in a fibrous capsule and receiving both efferent and afferent nerve supply. There are several types of endings for muscle spindles including the flower spray sensory ending and the annulo-spiral ending.

The second type is the Golgi corpuscle. Located in the tendons they are made up of tendinous fibers

*This article is an abstract of a paper presented to the department of occupational therapy of the University of Southern California in partial fulfillment of the requirements for the degree of Master of Arts. The graduate study was made possible by a scholarship from the California Elks Association.

†This is the first part of a three-installment article. The second part will appear in the March-April issue, 1955.

surrounded by a lymph space and enclosed within a fibrous capsule. These receptors are stimulated by tension.

Pacian corpuscles are the third type. They are ovoid bodies with concentric laminae. Mechanical stimulus, such as stretching or pressure which elongates the organ with consequent stretching of the nerve ending within the corpuscle, is adequate to cause an afferent discharge from these receptors. They are found in tendons, joints, periosteum (especially beneath tendinous insertions), in fascia covering muscles and in subcutaneous tissues. When pressure is made upon the skin greater in degree than that which causes the sensation of touch, the Pacian corpuscles are stimulated. This is not a true cutaneous sensation even though the sensation appears to come through the skin. The nerve fibers from Pacian corpuscles do not run in the cutaneous nerves supplying the skin but in the sensory nerves supplying tendons and other structures.

The fourth type of end organ is the free nerve endings which appear to be restricted to the blood vessels, muscle spindles and aponeurotic sheaths.

Some of the end organs react to tension, some react to movement, some react to stretch. Contraction of a muscle can produce all of these. Passive motion can produce all of these but some of them not as well as active contraction. End organs in muscle react to tension or stretch. End organs in fascia react to movement. Some end organs are excited by stretch and contraction. Each different group of receptors has a different "threshold," which is that level of stimulation adequate to produce a response. If a stimulus is insufficient to cause a nerve to discharge, it is considered a subliminal stimulus. The muscle spindles have a low threshold to passive stretch. Receptors in the tendons have a higher threshold to either active or passive stretch (that is, more stretching would be required to produce an afferent impulse from a receptor in a tendon than from the muscle spindle receptor). Tendon receptors, however, have an increased discharge rate during contraction. The rate of discharge for some of the receptors increases with increasing the load (resistance) and also with the rate of loading.

As a result of the impulses received by the central nervous system from proprioceptors, the contractions of individual muscles and groups of muscles are coordinated into smooth, finely adjusted and effective movements. Such action would be impossible in the absence of such guidance from the periphery. Some of the afferent impulses arouse no conscious sensation, the information being delivered to centers below the level of consciousness. Afferent fibers carrying proprioceptive impulses make up one-third to one-half of the fibers in a motor nerve.

Adrian-Bronk law. This law states that "the intensity of excitation is directly related to the frequency of the discharge of the individual neuron and to the number of active neurons."¹⁵ The frequency of discharge thus increases with the increase of stimulus. The increase in frequency is a principal factor in producing a motor response.

When electrodes are placed on a mixed (motor and sensory) nerve of an animal at rest, a continuous stream of action currents can be recorded. The impulses of the "resting" nerve have a low frequency—about three to five per second and arise mainly from proprioceptors of muscle and tendons. Passive movement of the limb supplied by this nerve causes an increase in the frequency of the impulses. Light pressure on the skin causes a rise in frequency which continues to rise with greater pressure. Adrian and Umrath have been able to locate a single Pacian corpuscle and stimulate it by pressure. The impulses were thus caused to discharge at a rate as high as one hundred per second. Adrian and Zotterman investigated the response to stretch of a single muscle spindle in a frog. The end organ obeyed the all-or-none law, for increasing the strength of stimulus did not increase the magnitude of the electrical response but did increase the frequency of the response from five to one hundred per second. Intensity of sensation, then, is dependent upon the number of impulses reaching the sensorium in a given time. This number is dependent upon the frequency of impulses from each nerve fiber and the total number of fibers involved.¹ This is important in understanding some of the principles that will be discussed later.

The reflex. Sherrington⁵⁰ explained the reflex as the "unit mechanism of the nervous system when that system is regarded in its integrative function." It is an involuntary muscular contraction which is a result of stimulation of a sense organ. Reflexes are initiated by afferent impulses which are conducted to the central nervous system and there cause other impulses to travel out to the muscle for a motor reaction. The outcome of the reflex is a response appropriate to the stimulus given the receptor. Although reflexes are not volitional, they nevertheless serve a purpose. Reflexes have enabled the organism to better adapt to its environment. Since the nervous system functions as a whole, the reflex should not be thought of as detached from it. The main problem in nervous coordination is the integration of reflexes. Therefore knowledge of reflex coordination is of prime importance to this study.

Summation. It is possible that a stimulus could be strong enough to elicit a response in a receptor but a response insufficient, when it reached the central nervous system, to cause a discharge of the motor neuron. This does not mean that the af-

erent stimulus was completely without effect. Each inadequate (subliminal) stimulus produces a "local excitatory state" which lowers the threshold of the neuron and which is of longer duration than the afferent impulses which produce it. Once this local excitatory state is established, successive subliminal stimuli may be sufficient to fire the neuron by summation of their effects. To accomplish this successive stimuli must reach the neuron rapidly enough to progressively expand the area of local excitation. They are ineffective if they are sufficiently infrequent to permit the local excitatory state to disappear. For this reason the frequency of the afferent impulse is important in summation and the term *temporal summation* is applied.

Another type of summation is *spatial summation*. If two subthreshold stimuli are applied simultaneously to a neuron from two different afferent nerves, summation may occur and a response result. Here the impulses reaching the efferent neuron over the two afferent nerves each produce a local excitatory state which together are adequate to produce discharge of the neuron, i.e., they summate spatially to exceed the neuron's threshold of excitation. This is particularly important in central excitation. It is sometimes called spinal induction. Both types of summation are means of facilitation.

Sherrington, one of the original investigators of this important phenomenon, has some interesting things to say about it. He believed that reflex arcs have a high capacity for summing excitation. He considered it a marked feature of reflex-arc conduction. It is common for one reflex to be immediately succeeded by an allied reflex. Stimuli moving over a receptive field are likely to excite such a sequence. In this sequence the threshold of each succeeding reflex is lowered by the excitation just preceding it. Many subliminal stimuli can join forces (summate) in this way to produce an impulse. One example of summation is the scratch reflex which cannot be elicited by a single induction shock but can be brought about by a prolonged series of subliminal stimuli. Sherrington has records where the reflex appeared only after delivery of the fortieth successive double shock.⁵⁰

Sherrington also suggested another application of summation.⁵¹ When an afferent impulse has caused a motoneuron to discharge, this same impulse creates a local excitatory state (called the subliminal fringe) in adjacent motoneurons. The excitation is not sufficient to cause a discharge, but when another overlapping subliminal fringe is created by a second afferent impulse, the two fringes together can cause a discharge. While either of two afferent impulses may cause one motor unit to respond, the two together would cause three or more motor units to respond. In records where two motor units are firing, one

somewhat faster than the other, it can be seen that when the faster slackens somewhat, its slower companion may disappear altogether, that is, cease firing.

Recruitment. When a stimulus of unaltered intensity is prolonged, many reflexes gradually increase because a progressively greater number of motoneurons are activated. This is termed recruitment. When a muscle is contracted in order to resist a weak force, only a few motor units are called into play. If the force is increased, progressively more motor units are activated until the entire muscle is contracting as a whole. This may occur either voluntarily or as an involuntary reflex.

Irradiation. When a stimulus is gradually increased in strength, the central excitatory process spreads to a progressively greater number of motoneurons. As a consequence, muscle groups in addition to the ones originally excited take part in the reflex response. This is known as irradiation. The impulses do not spread at random but follow along selected paths. Only those muscles which act synergically (those which combine to effect a purposeful, coordinated act) are activated. For example, if a weak stimulus is applied to the sole of the hind paw of an animal, it will cause flexion of the ankle alone. As the stimulus is increased, the knee is flexed, then the hip and later extension of the opposite hind leg (crossed extension reflex). If the stimulus is increased still further, extension of the ipsilateral (same side as stimulus) forelimb and finally flexion of the contralateral (opposite side) forelimb. This was originally observed by Sherrington.⁵⁰

After discharge. Sometimes a reflex center will continue to send out motor impulses after the stimulation of the afferent nerve or receptor has ceased. It results in the prolongation of the reflex response, like reflex momentum. It is called after-discharge. Sherrington presents electromyographic studies to support this theory. He felt that after-discharge was directly related to the intensity of the stimulus. He found that in the flexion reflex, the period of discharge could be lengthened tenfold by simply increasing the intensity of the stimulus without increasing its duration.⁵⁰

Adaptation. When a stimulus is received by a receptor and the receptor in turn discharges impulses at a rate consistent with the strength of the original stimulus, the impulses do not continue to be discharged at the same rate. It is as though the receptor becomes adapted to the stimulus, for the frequency diminishes and may soon cease entirely even though the stimulus might continue to be applied at the original intensity. It is a gradual diminution of receptivity and is a property common to most receptors.

Reciprocal innervation and successive induction. Voluntary or reflex contraction of a muscle is ac-

accompanied by the simultaneous relaxation of the antagonistic muscle. This is termed reciprocal innervation. When discussing irradiation, the crossed extension reflex was mentioned. This, too, is reciprocal innervation. When a reflex of one type is provoked (such as the flexion reflex) the reflex itself provokes a following antagonistic reflex (such as the extension reflex). This is to satisfy neural equilibrium. The extension reflex, in turn, lowers the threshold for the next flexion reflex. This rebound Sherrington named successive induction.⁵⁰

Course of afferent fibers in the central nervous system. When afferent fibers enter the spinal cord, they are regrouped according to the type of sensation to which each is responsive. When they reach the thalamus, the fibers undergo a second resorting. The paths for crude sensation do not ascend beyond this level. The other more discriminative qualities of sensation continue upward to the cortex.

The "potential sensory area," or that area of the cortex receiving afferent fibers projected from the thalamus, extends over the whole parietal and frontal lobes. Within this field there are four subregions which are distinguished on the basis of thalamic origin of the projection. The impulses reaching Brodman's areas four and six (motor and premotor areas) follow the spinocerebellar tracts through the cerebellum and thalamus to those areas. The relay nuclei of the thalamus which project to the postcentral gyrus (areas three, one, two and five) receive the great ascending somatosensory tracts of the spinal cord and the trigeminal lemniscus. This projection is topographically organized (that is, a certain area of the body is represented in a certain part of the cortex) and conducts some impulses from the ipsilateral half of the body as well as from the contralateral half.^{1, 10}

Topographical sensory representation is more diffuse than previously thought. The former theory in which different muscles of the body are represented in the different cortical areas of the precentral gyrus is based on brief threshold stimuli. Studies done by several authorities^{44, 39, 15} have found a multiplicity of representation with much overlapping. This new plan is based on the full potential of the area rather than just the obvious potential. The data come mainly from experimentation on cats, rabbits and monkeys. In the monkey the cortical areas for movement of the hip, knee, ankle and toe practically coincide, as do also movements of the shoulder, elbow, wrist and fingers. While Rasmussen found that areas for widely separated parts, such as upper and lower extremities, did not overlap, Murphy found that an arm and foot might overlap. Gellhorn points out that such overlapping decreases as the phylo-

genetic scale is ascended. It is also important to know that in areas in which prime movement is initiated, the ganglion cells are found in heaviest concentration and possess the lowest threshold. It takes primary facilitation to activate foci that are not dense or have a low threshold.

SUMMARY OF EXPERIMENTS

Much of what is known about proprioceptive facilitation is based on animal experimentation, supplemented with studies on human beings. The fact that most of the experimental work must be limited to monkeys, cats and dogs is a definite but unavoidable disadvantage. Various functions of the brain, particularly of the neocortex, differ among the animal species, and even wider differences exist between some of these animals and man. This has led to conclusions which may not always apply to human neurophysiology. However animal experiments have contributed much valuable information and they serve to guide human research.¹⁵

The importance of proprioception in willed movement was first pointed out by Sherrington. In one of his earliest experiments he demonstrated the difference between the motor performance of two cats, one of which had all four extremities cutaneously denervated from knee and elbow distally, and the other had the dorsal nerve roots of all four extremities severed. The first cat was able to walk up an inclined ladder without even looking at the rungs of the ladder. The cat with the sectioned dorsal roots attempted to climb the ladder but frequently fell even though he watched the rungs before taking a step. Other animals with dorsal roots cut would miss the mark in feeding, and all their willed movement showed incoordination. This showed clearly that the muscle proprioceptors are essential to orderly locomotion.¹⁰

In another experiment Sherrington severed the posterior (sensory) roots of cervical five, six, seven and eight and thoracic one, two and three on the right side only of a monkey. His observations were that the right arm was not used voluntarily except under excitement when the arm was "wildly misdirected." However the muscular responses did not differ in the two arms—not even in finger movements—when the respective areas of the motor cortex were stimulated electrically.⁵¹

While these experiments indicate that proprioception is an integral part of voluntary motion, they provide no information as to the neurophysiological mechanisms by which the afferent proprioceptive impulses are integrated with efferent cortical outflow. For this knowledge, the data from experiments must be consulted.

Contactual stimulation. Although this study does not attempt to cover cutaneous facilitation, it cannot be avoided here because the functional role of cutaneous receptors and proprioceptors must

be considered together in the response of an animal to contact stimulation. Sherrington first observed the close alliance of proprioceptors and exteroceptors. (Exteroceptors are adapted for such external stimuli as touch.) He found that when the skin of an animal is stimulated, the reflex muscular response excites proprioceptors in muscle, tendon and joints. Their impulses cooperate harmoniously with those from the stimulated exteroceptors, reinforcing each other in the response as a whole.⁶⁰

Stretch. Gellhorn has shown experimentally that subjecting a muscle to stretch evokes proprioceptive impulses within it which influence the efferent outflow to the muscles and shorten the summation time.²³ The action potential of the muscles was recorded by electromyography, which is a method of indicating the electrical currents generated in a muscle during its contraction. Cortical stimuli (in place of volition) were given to effect a response in the biceps and triceps muscles. The angle at which the forearm was placed in relation to the upper arm was noted. It was found that an "increase in the initial length of a muscle enhances its responsiveness to a standardized cortical stimulus."¹⁵ When the elbow was in a position to make the arm an angle of 120 degrees, the biceps reacted and the triceps did not. When the elbow was flexed to 65 degrees, the triceps and flexor carpi responded. In other words a muscle's contraction is facilitated by being in the stretched position. It is Gellhorn's opinion that the facilitation is due to proprioception.¹³

Levine and Kabat confirmed these results in patients performing voluntary muscular contraction. They used an electromyograph to determine the relationship between the degree of muscle contraction obtainable voluntarily and the amount of stretch on the muscle as determined by the position of the joint on which it acts. They found that the degree of stretch exerted by position of the joint determined the *amount of potential* created.³⁰

Resistance. Another experiment¹⁸ similar to the above¹³ but done subsequently to it, further substantiated the results of stretch and recognized another factor—tension caused by resistance. Again the biceps and triceps action potentials were recorded when the cortical foci were stimulated electrically. The arms were fixed immovably creating a resistance equivalent to tension on the muscle. Fixation of the elbow at 45 degrees enhanced triceps activity and at 150 degrees enhanced biceps activity. From this experiment Gellhorn drew the conclusion that proprioceptive impulses increase the responsiveness of those muscles in which the impulses originate as a result of active tension.¹⁶ It is clear, then, that resistance increases muscle response. One of the reasons it does so is that tension, unavoidably created by resistance, causes an increase in proprioceptive impulses.

Patterns of muscle action. Either contraction or stretching of one muscle influences other muscles associated with it. This was first brought to light by some experiments done by Loofbourrow and Gellhorn.

In the first experiment³⁵ cats and monkeys were used. Electromyograms were recorded from potentials tapped by fine wires sewn into the triceps and flexor carpi muscles. The ulna and humerus were fixed by metal braces. Proprioceptive stimulation was accomplished either by passive movement of the elbow joint or by a load applied to the triceps tendon.

When the elbow was flexed to 75 degrees the triceps and the flexor carpi were more easily excitable. To be sure that excitation of the flexor carpi was not due to stretch, its tendon was cut so that elbow movement could not affect it. It was still excited by stretching of the triceps. "This shows conclusively that proprioceptive impulses arising in the triceps as a result of its passive stretch reflexly excite the flexor carpi."³⁵

Two or more muscles working together in this way might be considered a motion pattern or a pattern of muscle action. A corresponding but opposite pattern occurred when the elbow was extended. This position resulted in marked activity of the biceps, extensor carpi and brachioradialis. Here again response in the extensor carpi was not due to its being stretched but rather to reflexes arising in the stretched flexors. Similarly, dorsal flexion (hyperextension) of the wrist excited the biceps complex and flexion at the wrist facilitated the triceps. Thus reflexes of proprioceptive origin result in patterns of muscular coordination identical with those resulting from cortical stimulation.³⁵

Loofbourrow and Gellhorn point out that even greater activity could be evoked in a muscle by proprioceptive impulses arising in other muscles. He concluded that any muscle in an extremity is potentially subject to some regulation by proprioceptive impulses elicited in all other muscles of that extremity. This seems to be of great importance in muscle coordination.³⁵

It should be pointed out that positioning of pronation or supination was not mentioned in this experiment and that the biceps and extensor carpi do not invariably work together.

Levine and Kabat, in their electromyographic studies on patients also found that positioning facilitated muscle action for reasons other than stretch. For example, placing the forearm in supination facilitated the biceps even though this positioning actually shortened the length of the biceps.³⁰

Loofbourrow and Gellhorn demonstrated that the reflex patterns elicited by stimulation of afferent nerves are also modified by proprioceptive impulses. Using cats and monkeys, he recorded electromyograms from five muscles at the same time: the biceps, triceps, brachioradialis, extensor carpi

and a flexor carpi. He then stimulated various afferent nerves. Generally speaking the results were as follows. The radial, ulnar, dorsal cutaneous and median nerves excited the biceps—extensor carpi—brachioradialis group while stimulation of the cutaneous, antibrachii medialis or lateralis nerves evoked a response in the triceps—flexor carpi group. Loofbourrow concluded that the same fundamental patterns of response are elicited by cortical stimulation, muscle stretch and stimulation of the appropriate peripheral nerve.³⁴

Lloyd also studied the effect of afferent volleys from one muscle on the other muscles. His results were similar to those of Loofbourrow and Gellhorn and his conclusions were that such afferent impulses facilitate the synergic muscles at the same time.³¹ In other words, afferent impulses arising in one muscle facilitate the action of its synergists.

Gellhorn has contributed some additional studies which further substantiate the close functional association of certain muscle groups. In one study¹⁷ electrodes were sewn in the muscles of monkeys and electromyograms were taken of muscle response to electrical stimulation of the appropriate cortical motor area. The upper extremities were placed in different positions to determine the role of the proprioceptive impulses induced by each position. It was found that stimulation of a cortical point which would elicit movement only in the biceps and triceps increased the response in the brachioradialis and extensor digitorum communis when the elbow was in extension. When the elbow was in flexion, the response in the triceps, palmaris longus and flexor digitorum sublimus was increased. Continuing the same approach, most of the muscles were put into either a "biceps complex" or "triceps complex" indicating that the muscles of each were stimulated as a group by proprioceptive impulses. The biceps complex contained the biceps, extensor carpi ulnaris, extensor digitorum communis, pronator teres, abductor pollicis longus, adductor pollicis, supinator, extensor digitorum proprius II, III and IV, and the brachioradialis. The triceps complex included the triceps, flexor carpi ulnaris, flexor carpi radialis, palmaris longus, flexor digitorum sublimus, flexor digitorum profundus, dorso-epitrochlearis, pectoralis major, trapezius, latissimus dorsi, infraspinatus, supraspinatus, spino-deltoid and the teres major. An important point is that certain muscles would shift from one complex to the other with variations in the positioning.

Fixation of the forearm in supination or pronation also produced significant facilitation. For example, pronation facilitated both complexes; that is, the response to cortical stimulation of any muscle in either complex was invariably increased when the forearm was placed in pronation. Con-

versely, the response of the antagonistic group was correspondingly increased by supination. Pronation also facilitated shoulder movement.

Protraction and retraction of the shoulder had an effect of arm and shoulder muscles when their cortical area was stimulated. For instance, fixing the shoulder in protraction increased the responsiveness of these muscles. In this experimental situation and the one mentioned above, it may reasonably be assumed that voluntary contraction of the same muscles whose actions were elicited by electrical stimulation of the cortex would produce essentially the same results. Gellhorn feels that these patterns are due to the modification of summation time by proprioceptive impulses.¹⁷

Gellhorn did an experiment¹⁴ on twelve people emphasizing the roles of pronation and supination in movement patterns. With the arms in a horizontal position, the forearm extended at 130 degrees and the forearm held by clamps to maintain the position, the subjects were requested to flex or extend at the wrist when the hand was prone or supine. The activity of the biceps, triceps, flexor carpi radialis and extensor carpi radialis were recorded simultaneously with an electromyograph from surface electrodes.

When the wrist was flexed with the hand held in pronation, only the wrist muscles contracted when slight exertion was used. With greater exertion, the triceps responded also. No potentials were recorded from the extensor carpi radialis, and only occasional slight potentials were recorded in the biceps when under great effort. When the forearm was held in supination, extension of the wrist was accompanied by potentials in the triceps, and flexion of the wrist under resistance by potentials in the biceps. The subjects varied in the test of wrist flexion with hand pronated, although more potentials were found in the biceps than in the triceps. From these data the conclusion was drawn that reflex activation of the upper arm muscles intensify and assist the action of the flexors and extensors of the wrist according to the degree of stress. Gellhorn further points out that this is clearly a practical arrangement, for the appropriate muscle is brought into play reflexly, even though it could not help under the experimental conditions. He finally concludes: "Apparently it is the functional role of the muscle and not simply the degree of its activation which determines associated synergic contraction."¹⁴

It must be concluded, therefore, that the pattern of proprioceptive facilitation in muscles other than those whose contraction is being elicited cortically depends on two variable factors: (1) the particular muscle or muscles whose contraction is being initiated, and (2) the degree of contraction or stress placed on other muscles by positioning. To elaborate, voluntary contraction of the biceps with

the forearm supinated will result in the facilitation of a different group of muscles than if the forearm were pronated or the shoulder retracted; whereas voluntary contraction of the deltoid under each of these same conditions would produce facilitatory response in still different combinations or patterns of muscles. In each situation the particular muscles being facilitated by proprioceptive reflexes are those whose activity is most closely correlated with that of the muscle being contracted voluntarily in the particular movement pattern being carried out.

These phenomena provide further support for Sherrington's view that reflex activity in general is based on functional movement patterns, not on neuroanatomical segments.

Functional significance of patterns of motion. Gellhorn, who has investigated proprioceptive facilitation extensively, has drawn some important conclusions from his results.⁵¹ Stimulation of the biceps complex results in grasping movements, of the triceps complex in a supporting reaction useful in quadrupedal walking. The effect of cortical stimulation depends upon the functional significance of the cortically induced activity. The movement patterns obtained can be combined into new forms according to functional demands. Although proprioceptive end organs are not the only structures that contribute to elicited muscular response, proprioception is the factor which apparently determines the responsive area in the motor cortex. Proprioceptive reflexes are closely integrated with cortically induced movements. Since both electrical stimulation and volition lead to the same type of motor discharges, it is highly probable that the forms of activity induced by stimulation of cortical motor areas constitute basic elements of voluntary movement. Gellhorn has concluded that "Proprioception is obviously of great importance for all movements no matter whether they are simple reflexes studied in the spinal animal or highly complex and skilled movements executed through will power."⁵²

Successive induction. Sherrington performed most of the experiments directly relating to successive induction. He found that a strong flexion reflex was induced from and following an extensor reflex movement. The intercalated flexor reflex lowered the threshold for the aftercoming extension reflexes and increased their after-discharge. He found that the effect endured through four or five minutes although it progressively diminished. Likewise, the extension reflex predisposed or actually induced a flexion reflex. Sherrington felt the process played a part in linking reflexes together in a coordinate sequence.⁵⁰

The phenomenon of co-innervation which was demonstrated in some of the studies cited above^{35, 34, 21, 13, 17} may also be related to successive induction. It was noted experimentally that

activity appearing in the biceps complex was associated initially with inhibition of the triceps, but later by an increased activity in the triceps. It was particularly evident after the biceps had been subjected to considerable resistance.¹³ In several of the experiments, co-innervation was a more prominent occurrence with stimulation of the biceps complex than of the triceps complex.^{16, 17} Similar results were obtained with the carpal muscles; if the extensors carpi were facilitated, the effect was seen in the flexors carpi, but the reverse was not true.¹⁶

Facilitation through the cerebellum. Morin performed an experiment on cats in which he found that the afferent pathways from all four legs projected to the ipsilateral anterior lobe of the cerebellum.³⁷ In another experiment done by Nulsun, Black and Drake,⁴¹ dogs, monkeys and chimpanzees—but not the cat—showed an increased facilitation of any given motor movement when the cerebellum was stimulated. The fastigial nuclei transmit the facilitatory impulses. Thus the same cerebellar point which receives afferent stimuli from a localized somatic area will, upon electrical stimulation, facilitate motor activity in the same region of the body.⁴¹

Bilateral facilitation. There have been several experimental investigations of the effect that movement on one side of the body has on the other side. Gardner and Haddad¹² found that stimulating one nerve of the hind leg of a cat was followed by potential changes in the cerebral cortex bilaterally. They also found that in addition to the dorsal funiculi there are paths in the lateral funiculi of the spinal cord by which impulses from any nerve in either hind leg can reach any of the four somatic cortical areas of either cerebral hemisphere.¹² This differs from the current thought that afferent impulses, with the probable exception of visceral pain, are conducted to the contralateral hemisphere only.

Peacock and Hodes⁴² stimulated the regions of the forebrain unilaterally and elicited a prompt increase in the contraction of muscles on both sides of the body. Both the flexor and the extensor muscle groups were facilitated. The authors state that interneuron activity is seen most frequently in the extrapyramidal tract. They found a concentration of points in the cortex which, when stimulated, increased the strength of the motor response. It was suggested that perhaps the pyramidal system, in addition to the function of producing contractions of individual muscles, facilitates sub-cortical or peripheral influences. The one indisputable and most significant conclusion from this experiment, however, is that "Stimulation of appropriate regions of one side of the brain caused enhancement of muscular contractions on both sides of the body."⁴²

The extensor thrust and crossed extension reflex. The extensor thrust is part of the positive supporting mechanism. Although it is best seen in the lower extremities, it has also been described in the upper extremities.²⁵ It is seen as brief, strong extension of the hip, knee and ankle when pressure is applied to the sole of the foot. Such pressure mechanically exerts stretch upon the small muscles of the foot which contain the proprioceptors primarily responsible for this reflex.¹⁰ Experimentally it cannot be elicited by electrical stimulation.

The crossed extension reflex in the dog is brought about by a painful stimulation of one hind limb, resulting in withdrawal of the ipsilateral limb and extension of the contralateral limb. This is probably an important element in locomotion.⁵⁰

The grasp reflex and instinctive grasp response. These are automatic grasping or prehensile reactions which are integrated and modified at the cortical level. They respond to visual, tactile and proprioceptive stimuli. Moving contact with the hand is an adequate stimulus for the grasp reflex proper. Here is an example of the necessary co-operation of exteroceptive and proprioceptive impulses to produce a response. The grasp reflex begins as a tactile response in which there is quick but weak flexion and adduction of the fingers. These movements are immediately reinforced by proprioceptive stimuli. It can be distinguished from spasticity because the grasp reflex cannot be elicited through proprioception alone. Furthermore the proprioceptive phase of the grasp reflex is self-sustaining, whereas spasticity exhibits the lengthening reaction and ultimately releases.

The grasp reflex is best elicited by putting two or three of the observer's fingers between the thumb and first finger of the patient's hand and then withdrawing them so as to cause tactile and pressure sensation over the thenar eminence, palm and proximal surface of the fingers. This should be repeated quickly two or three times in order to get a response. (Note the summation of stimuli.) Heavier and more rapid pressure is more effective than tactile stimulation only. Impulses are constantly needed to maintain the reflex.⁴⁸ The pyramidal system must function in order for the grasp reflex to be most easily elicited.⁷

The instinctive grasp response begins as a tactile response, reinforced by proprioceptive impulses. This indicates it is built on the grasp reflex but requires different stimuli. However, the instinctive grasp response is a succession of flexion and extension movements of the fingers to enable the hand to grasp the stimulating object. It includes turning the arm or hand so as to be able to grasp the object. Once the object has been grasped, any movement of the object reinforces the response. Instinctive grasping involves high integration of motor behavior and appears later than other re-

flexes, including the grasp reflex.⁷ The instinctive grasp response can be elicited by stimulating the same area as for the grasp reflex, but it can be elicited from a wider area (including the hypothenar area and tips of fingers) if the stimulus is strong. The best stimulus is a light stationary touch of considerable size. Heavier pressure may inhibit reaction.⁴⁸

A comprehensive study relating to automatic grasp responses has been done by Twitchell,⁵³ working with human beings. Twenty-five patients were followed from the time of admission for hemiplegia due to thrombosis or embolism up to the time when a fairly stable condition was reached. During their recovery there was a time when proprioceptive impulses were increasingly exaggerated and no muscular contraction resulted from volition alone. During this time, however, it was found that proprioceptive reactions and the willed effort to produce a movement could mutually facilitate each other. This was determined by resting the patient's fingers palmar surface down on the examiner's middle finger. Then the examiner tapped his own finger with a reflex hammer. If the patient did not try to move his finger, nothing happened, but when he tried to move his fingers along with the hammering, finger jerks were elicited. A few days later the responses were present without the patient's willing the motion, although they were more pronounced with effort. In one patient the fingers flexed almost completely. The taps were given at the rate of about two per second. A single tap was insufficient. Twitchell believes that the fingers 'sed as a result of afferent proprioceptive neurons being stimulated by the repeated finger jerks.⁵³

As the same facilitation continued, the flexion response also occurred in the wrist, elbow and shoulder, although willed synergy for these motions was not possible. In other words, proprioceptive facilitation preceded voluntary motion. After voluntary action returned, finger motion was more powerful when accompanied by sustained traction (stretch) or periodic tendon jerks. Proprioceptive facilitation was present, however, in only twelve out of twenty-five patients.

Another proprioceptive facilitatory method utilized to obtain a grasp response was passive hyperextension of the fingers (similar to the studies on stretch above). This method was ineffective at the time when the above proprioceptive technique was effective, but it appeared later and facilitated the response obtained by the above technique. Both became effective before voluntary motion appeared and facilitated voluntary motion when it did appear.

A third method of encouraging grasp was through tactile stimulation, found most effective by Denny-Brown and Seyfarth^{7, 48} when willed

flexion of all fingers began to return. It was at this time that Twitchell found that if the patient tried to flex his fingers at the same time that a contact stimulus was given to the palm of his hand, there was a more powerful and complete flexion of the fingers.⁵³

Summary. That proprioception plays an important role in conscious activity is uniformly supported by the experimenters.

In Gooddy's work it is stated that a willed movement is not predetermined in form, duration or complexity, but is rather molded throughout its entire course by impulses from visual exteroceptors and proprioceptors. The pyramidal system can be considered as internuncial—a pathway through which the sensory system initiates and continuously directs the neurons affecting the muscles that carry out willed movement. When a person learns to play the piano, he is only learning the sensations which accompany the movement. He learns sensation—movement.¹⁹

Gellhorn, similarly, has concluded that the foundation of voluntary movement is a diffuse cortical motor discharge which is modified, sustained and directed into the desired pattern through proprioceptive impulses.¹⁵

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THE ROLE OF THE OCCUPATIONAL THERAPIST IN THE REEDUCATION OF APHASIA PATIENTS

PART II†

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RECEPTIVE DISORDERS

The aphasic difficulties can generally be grouped into receptive or expressive disorders. The receptive disorders generally clear more rapidly than the expressive ones and are contained under the agnosia classification, manifesting themselves by errors in reception of visual and auditory stimuli. As sensory aphasia involves the receptive areas of speech, it will be discussed with the specific receptive disability.

VISUAL AGNOSIA. This inability to recognize simple and geometric forms can result in failure to recognize letter forms in reading or abstract geometric forms. The former is the more acute problem, as recognition of letter forms is essential to reading. Training can be initiated by the use of small wooden blocks in the form of circles, squares, triangles and crosses. The purpose of these blocks is to illustrate that each physical shape has differentiating characteristics, that the principle of the shape is necessary in order to group the blocks satisfactorily and that each group has a different name. The aphasic sorts the blocks by groups and if possible, names the shape as he puts it into the correct group. If wooden blocks are not available, paper forms can be drawn by the therapist and the aphasic can cut these and sort them into groups, naming them, if possible, as the sorting process is done. Another method of teaching recognition of form is to have the aphasic trace over a form on paper or on the blackboard as it is named by the therapist while he is tracing.

VISUAL NUMBER AGNOSIA. This disability is not as vital to recovery or adjustment as is the visual letter type of agnosia, and reeducation is usually begun after beginning reading and speech have been accomplished. It is done by simple presentation and repetition. There are several ways in which reeducation of this type of patient can be approached: (1) The aphasic individual can write from dictation, repeating the spoken numeral as the digit is copied or traced. (2) The fingers can be used and a number assigned to each finger. (3) A numbered calendar can be utilized for teaching purposes. (4) Numbers can be identified with scores in games, exchange of money, calculation of recipes, purchase of food, etcetera. Card games, for some aphasics, provide a stimulating teaching experience. (5) Flash cards can be used as a drill process in recognition of numbers. Learning the digits by rote is rarely utilized as it means

that a relearning process has to be done when the digits are used as numbers. Numbers are used as entities and if the individual learns them by rote, the entire sequence may have to be run through to find the number which he is seeking.

VISUAL LETTER AGNOSIA. If the aphasic can recognize words but not letters, meaningful reading can still be accomplished with this disability. If the individual cannot recognize words but only letters, then the problem is more acute and interference with meaningful reading will result.

Learning the alphabet by rote does not indicate accomplishment toward reading. It is best to use a series of picture forms to illustrate letters, i.e.: *A* is for *animal*, *apple*, etcetera, *B* is for *ball*, *boy*, *baby*, etcetera. A preferred method for obtaining recall is to have the aphasic individual trace the word or letter with his finger. This kinesthetic stimulus is a direct and effective method with many patients.

Colored illustrations may add to the interest and ease in learning. If it is learned that the aphasic has some specific interests, pictures relating to these can be utilized. Football, baseball, household furnishings, gardens, hunting, fishing and many other interests have numerous stimulating picture possibilities. These items require preparation time by the therapist but are appropriate to the adult level of experience and learning of the aphasic. A few interesting children's books which can be used until suitable material is prepared are, *My Little Golden Dictionary*,¹² *The Little Golden Book of Words*,¹³ and *My First Dictionary*.¹⁴

VISUAL WORD AGNOSIA (Alexia). The inability to comprehend the printed word is characteristic of many aphasics. This disability is sometimes concurrent with the two types discussed previously, visual agnosia and visual letter agnosia. Training for those must be accomplished before the individual can be trained for sight recognition of the whole words and phrases necessary for comprehension and retention. Books on remedial reading will be found helpful in assisting the aphasic individual with this lack.¹⁵

"Instant recognition is necessary for the advancement of reading skill."¹⁶ With this as a goal, word flash cards procurable from the Expression Company, Boston, can be used to achieve speed in recognition and to check on comprehension and

†This is the second part of a three-installment article. The last section will appear in the March-April issue.

retention. A simple drill book that has been used successfully with this type of aphasic is *Using Words*.¹⁷ Another type of drill book found valuable for use with aphasics is *Daily Drills in Language Skills*.¹⁸

After speed in recognition has been achieved, the next step is comprehension of the meaning of short phrases. The testing of the individual's achievement in this area can be done by having the individual repeat the meaning of short phrases immediately after reading them. With some individuals, the paragraph is a better level for checking comprehension and retention. Any form of retelling can be used whether it is by action, words or writing. It is difficult for the aphasic to abstract so this inability must be considered very carefully in evaluating what the individual has selected as the most important items from the reading matter.

Simplified reading material for the adult aphasic who is not ready for periodicals or standard fiction is available from The Fideler Company, Grand Rapids, Michigan. This company publishes a series of books about different countries which are not only interesting but also worthwhile to the adult with limited reading ability. Specialty books such as *Working with Electricity*¹⁹ have been written on a simplified level as have books and novels of a classical nature.

VISUAL COLOR AGNOSIA. This type of agnosia is rarely seen. Difficulties with color usually are manifested by inability to name the color (anomia).

AUDITORY AGNOSIA. The inability of the aphasic to comprehend the spoken word necessitates the therapist's use of visual and tactile stimuli in the reeducation program. The material used for motivation must be of interest to the individual.

Common objects are used to stimulate tactile perception. These are presented simultaneously with a picture of the object for stimulation of visual perception. If the spoken name for the object and picture is meaningless to the aphasic, the therapist should print and write the word on the blackboard or on paper, verbalizing it as it is written. The aphasic individual should then copy the name and repeat it. The object and picture are presented again and the name repeated.

After a series of written and spoken repetitions of objects and pictures, the aphasic individual learns that the spoken word is associated with the printed name and object. A variation in the procedure is obtained by presenting the name of the object or picture and having the individual select the correct one from an assembled group or series. The differences in the individual aphasic, the rapidity of fatigue and the high frustration level require that the therapist combine all types of stimulating materials and different approaches in his technique.

EXPRESSIVE DISORDERS

The expressive disorders are those which are seen in an over-all motor problem in communication whether it be by speech, writing, gestures or in combination. These motor disabilities, therefore, are forms of apraxia. The expressive aphasic can follow both oral and written instruction. Whereas the receptive aphasic is unaware of errors made because of failures in visual or auditory pathways, the expressive aphasic recognizes errors but cannot correct them. The frustration of the expressive aphasic is more evident than that of the receptive aphasic as the former individual has unimpaired mechanisms for self evaluation, self comparison and self criticism.

VERBAL APRAXIA (Motor Aphasia) (Apractic Aphasia). Through speech and other forms of communication we convey not only our feelings, attitudes and thoughts, but also our needs and questions. The therapist needs only to eliminate means of communication with others for several hours during the course of an ordinary day to realize the frustration and isolation of the verbal apractic. The withdrawal tendencies, the hyper-irritability, the seeming lack of initiative and the feeling of inadequacy of the aphasic then should be easily understood.

There is no one specific procedure to follow in teaching an aphasic to speak. Each aphasic is an individual with a personality and complication entirely singular in nature. General procedures are therefore suggested from which the therapist can initiate a program.

Placement of lip and tongue must of necessity have precedence over any other step in the teaching program. It is extremely beneficial to use a large mirror in which the aphasic, sitting at the side of the therapist, can watch the movement and placement of the therapist's lips and tongue and can then attempt to imitate those movements. In some instances, the aphasic may need a kinesthetic aid such as the therapist pressing the individual's lips together to produce the "m" or hum sound. Extinguishing a candle or match is sometimes used to stimulate the individual to propel the air outward from the mouth for the "p" sound.

In achieving the "l" sound, a tongue depressor may be necessary to demonstrate correct tongue placement. These movements and placements are not usually achieved in a single period. Patience and understanding are prerequisites for the therapist working with speech problems.

The most easily imitated consonants are learned first. These are *p* and *b* in which the air is expelled through the mouth; and *m* in which the air is expelled through the nose. The printed letter is usually presented simultaneously with the spoken consonant to aid in establishing the asso-

ciation. As the individual acquires the consonant and its sound, it is listed in a notebook for study outside the instruction period.

After consonant sounds are learned, they are combined with the various vowels for syllable drill. Vowels are more easily acquired than consonants. When the aphasic has the beginning three consonants, *p*, *b* and *m* and the interchanging vowel sounds, one syllable words are formed. As these are acquired by the aphasic they are listed in the notebook for study. It may be necessary to have pictures of the objects in the notebook to strengthen the association. Such words and objects might consist of *pan*, *map*, *man*, etcetera.

Drill is continued on this basic level until the individual can say and write the proper word when the picture of the object is shown. Writing ability may lag at this point, and the individual progress more rapidly on the oral phase. Oral, written, kinesthetic and tracing methods are all used to stimulate and maintain the aphasic's interest. Abstract words are not used as it is difficult to portray their meaning or combine them with an object for association. The relearning of language is usually in this order: nouns, verbs, adjectives and adverbs.

When successful recall is made of the name of the object upon presentation of the picture, further varied drill is obtained by having the individual select the pictured object from a group of other pictures. Additional drill can be obtained by presenting the picture and having the individual speak or write the name of the object.

The presentation of consonants is usually that of normal acquisition of sounds in the development of speech: *p*, *b*, *m*, *w*, *h*, *d*, *t*, *m*, *g*, *k*, *ng*, *j*, *f*, *v*, *th*, *dz*, *sh*, *l*, *z*, *s*, *r*, *hw*. Vowel positioning and sounds are taught concurrently.

Objects which the individual uses or with which he has daily contact should be introduced as early as possible. This will enrich not only the association of the word with the object, but also will give the adult individual a feeling of concrete achievement.

Three books that have proved helpful in teaching the adult aphasic and in providing sound drills are: *Elementary Education for Adults*,²⁰ *First Lessons in Speech Improvement*²¹ and *Better Speech and Better Reading*.²²

After the naming level has been achieved, verbs are added and simple sentences can be formed. These are also included in the notebook for outside practice. Pronouns, adjectives, adverbs and some verbs are more abstract than nouns and other verb forms, and attempts to teach these result in confusion. As communication becomes possible on the simplified sentence level, it is most practical to teach these words in sentence structure and allow their meaning and place in the sentence

to result from usage.

Many approaches and variations in techniques and stimuli may have to be used to find the one approach which is suitable for the individual adult aphasic. It is a time-consuming procedure and a stimulating challenge to the alert and interested therapist.

NONVERBAL APRAXIA. Nonverbal apraxia, as has been stated previously, is an inability to perform. Of the three types, kinetic, ideational and ideokinetic, the latter is more rare and is usually transient.

In kinetic apraxia, treatment in occupational therapy is directed toward reeducating the functional grasp of the individual. Treatment similar to that for muscle weakness of the upper extremity can be initiated with gross motions and progression made to fine, discreet motions. Built-up tool handles may be necessary to achieve success in beginning grasp.

Initial occupational therapy for ideokinetic and ideational apraxia require simple, uncomplicated activities as these individuals cannot follow instruction. The ideokinetic apractic can perform simple movements but not those which require a sequence of muscular activity. It may be necessary to begin treatment of this individual by having the therapist perform the motion and the individual imitate it. The therapist may have to manually guide the individual's arm and hand through the motion.

The ideokinetic's idea and motor patterns are intact, the pathway connecting them is interrupted. Thus it is the formation of new association patterns toward which the treatment is directed. This individual can perform but does not know how.

The ideational apractic can also perform simple movements but cannot combine these into a purposeful plan. This individual's ideation is not sustained, and his actions are those of extreme absent-mindedness. He needs careful guidance on a one-step level or one proposition at a time. Only when that level or proposition is thoroughly assimilated can the next step be added. Confusion and frustration result when this individual is confronted with more than he is capable of remembering at one time. This individual can perform but forgets to do so.

Agraphia when related to apraxia may manifest itself as a difficulty in which the individual is unable to recall how to form words or letters in script or printed style. Treatment for the kinetic agraphic would be directed toward the reestablishment of grasp and writing patterns. Initially this treatment would follow that given for the non-verbal apractic.

The agraphic with the ideokinetic apraxia has an adequate grasp but fails to recall how to form letters or words. Work is begun with the muscular movements used in writing. Teaching a co-

ordinated, forward, circular motion might be initiated by the use of finger painting. The blackboard can also be used and the agraphic individual can either trace over letters drawn by the therapist, or use the letters as a guide for copying. Both script and printed letters should be taught. The therapist may have to guide the individual's hand as beginning movements are learned.

Use of a blackboard is beneficial as the letters can be made large and are more easily formed. Work should be shifted to a writing board or desk as soon as possible as this is the most usual or natural pattern for writing. As in beginning writing with children, the letters should be large and both writing and printing be done on lined paper. The use of words should be initiated as soon as letter formation can be performed fairly distinctly.

ANOMIA. Teaching the adult aphasic to identify and name objects is very similar to developing speech patterns in a child. It is useful to begin naming objects that are not only common to everyday use but those that can be grouped together as units. Having items of similar purpose provides, in many instances, associations which may aid the individual in naming. Examples of units which can be utilized are: *bacon, eggs, coffee, cream, sugar, bread and butter; hat, coat, pants, shirt, tie, shoes, socks; bed, pillow, sheet, blanket; head, eyes, nose, mouth, ears, hair;* etcetera. These units can be demonstrated as objects for tactile association and pictures of them are easily acquired.

The therapist displays the object together with a picture and the individual attempts to name it. If the aphasic is unsuccessful, the name of the object is printed and written on the blackboard as the therapist names it. It is unwise to drill on the same object or name over too lengthy a period. There should be a slightly different approach for the next object to be learned as this will lessen fatigue and sustain the aphasic's interest.

Many times an aphasic will fail to identify an object but will succeed if an approach other than direct naming is used. For example: a ring can be shown to an individual who will probably reply, "It is something you wear on your finger." A correct naming of the object may be accomplished by asking the individual, "What did you put on your wife's finger the day you were married?" "A ring, of course!"

After the individual has been successful in naming a few objects and their associative words, these should be included in a simple sentence. A naming drill for review purposes should be done frequently by presenting the objects and having the individual name them.

To name and identify objects is a slow process and necessitates patience and understanding on the part of the therapist. In some instances the individual is stimulated to learn by presenting ob-

jects and pictures from his profession or hobby rather than the more useful names of every day items. In other instances, this focus proves frustrating.

Books which have proved valuable in the re-education of the anomic aphasic are: *What's Its Name*,²³ *Speech Through Pictures*,²⁴ *My First Dictionary*,²⁵ and *The Golden Dictionary*.²⁶ The preferred of these is *What's Its Name*.

Pronouns, adjectives, adverbs, articles and prepositions are most easily learned at a later date. As was suggested previously in the section under verbal apraxia, their positioning and use can be learned through sentence exercises.

PARAPHASIA. This disability of language formulation is one of the most difficult to overcome as the therapist not only has to build correct symbolic speech but also has to discourage the nonsensical pattern with which the individual has been expressing himself. The individual has to be taught to speak slowly and distinctly. He has to be taught phonetic speech sounds for auditory discrimination and recognition of error (*pie, tie, die, lie, etc.*) Sometimes the individual is asked to describe a short paragraph which he has read. A device is needed to help him organize his thinking. The individual may be given just the noun to which he adds the verb for completion of a simple sentence. The use of recordings may prove useful in aiding the individual toward recognition of his use of unnecessary phrases and excessive wordage.

ACALCULIA. The aphasic individual in a hospital need not deal with numbers each day as the hospital routine is more or less easily pursued. However numbers are a part of our every-day living: in knowing what time it is, how to make change, etcetera. Some individuals have trouble recognizing numbers, mathematical signs, values of different coins, or have lost the ability to count objects or to measure distances. These individuals have to be taught along the lines that their area of difficulty indicates, and if necessary, beginning arithmetic is taught for number concepts.

Any elementary arithmetic book is useful for a beginning in this area. Some of the more frequently used ones are listed in the bibliography.²⁷ Counting can be learned with a number of objects such as pennies, blocks, cigarettes, etcetera. Arithmetic readiness cards²⁸ are available for practice in subtraction, addition, multiplication and grouping. These are available in sets for different grade levels. Drill books are excellent for outside practice.²⁹

Play clocks have been designed for teaching time and are available in toy departments. Banking is another activity that can be practiced by the use of blank checks, deposit slips, withdrawal slips, etcetera. Numbers are used not only for the amounts, but also for dates and addresses. Drills

should be held periodically to strengthen and supplement what is being learned.

The activities in which an aphasic individual must be reeducated are rarely singular. Speech, writing and reading difficulties are usually simultaneous and the reeducation process embodies all of them in the training program. The emphasis, as with a nonverbal apractic, is placed on learning to articulate, but the written consonant on the blackboard, the aphasic's copying or tracing it, his use of it in a simple word, are all a part of the total approach. Associations in the learning process are constantly utilized for reinforcement. Auditory, visual and tactile stimuli are used interchangeably to maintain the aphasic's interest. The aphasic's interests are explored to find a more suitable approach if the usual approaches to the learning situation are not productive.

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NFIP FELLOWSHIP

The National Foundation for Infantile Paralysis announces the availability of a limited number of fellowships in the field of occupational therapy teaching. These fellowships, which may be approved for one to three years, are made available to help prepare properly qualified candidates as instructors and administrators in occupational therapy schools.

These fellowships are awarded as a part of the National Foundation's program of professional education for which \$22,700,000 in March of Dimes funds have been appropriated since 1938 through 1954.

Applicants for fellowships must be U. S. citizens (or applicants for citizenship). Eligibility requirements also include: sound health; a baccalaureate degree; membership in or registration by the American Occupational Therapy Association; and significant satisfactory general experience as an occupational therapist, preferably for three years or more.

Each candidate must propose a program which will include basic academic and clinical study, specialized training in one or more fields of occupational therapy, and supervised experience in teaching and school administration. Occupational therapy schools may themselves propose especially well qualified candidates for these March of Dimes occupational therapy teaching fellowships. Selection of candidates is made on a competitive basis by the National Foundation's clinical fellowship committee.

Financial benefits are based on the individual need of each applicant and may include tuition, books, travel expenditures incidental to the program, and maintenance.

Applications may be submitted at any time during the year but must be submitted by March 1 for consideration in May; by September 1 for consideration in November; and by December 1 for consideration in February.

For further information and application forms write The National Foundation for Infantile Paralysis, Division of Professional Education, 120 Broadway, New York 5, N. Y.

CORRESPONDENCE COURSE

The physical education department, division of recreation leadership of the University of Minnesota in cooperation with the correspondence study department announces a new correspondence course to acquaint hospital personnel with recreation programs and principles as are offered for patients in hospitals. In this course attention is centered upon the types of patients in hospitals and institutions who participate in planned recreation and the methods used to make these programs effective and meaningful. The lessons are planned around four major divisions: the place of recreation in hospitals; adapted activities for patients; the hospital recreation program; and leadership, supervision and volunteers.

The course, entitled "Orientation to Recreation in Hospitals," has 16 lesson assignments and carries three quarter credits. The tuition is \$15 plus a materials fee of \$1.25. There are six basic textbooks and booklets for this course totaling about \$4.00. For more information write:

Correspondence Study Department,
General Extension Division,
University of Minnesota,
Minneapolis 14, Minnesota.

THE PRE-SCHOOL HOSPITALIZED CHILD WITH TUBERCULOSIS

ELEANOR FROME, O.T.R.

The pre-school child with tuberculosis faces serious problems in addition to that of overcoming his illness. He is subjected to the ill effects of long hospitalization during the most formative years of his life. Observed on the ward he is generally suspicious of strangers and indifferent to familiar faces. Most of the time he is apathetic and unresponsive. He is much less enthusiastic over parties and special treats than other hospitalized children. Unlike most children he does not become upset when his parents leave him on visiting day. When he is stimulated or aroused by play activity, he will over-react. His manifestations of pleasure may quickly border on hysteria. He shows his great need for a loving relationship by calling anyone who is consistently interested in him "Mommy." He longs for close physical contact and clings to any worker who is kind to him. He has the same wants and needs as normal children but restrictions in physical activity affect his personality. Essentially he is a normal child with a diseased lung, but long hospitalization at an early age may cause psychological and social retardation.

Some of his emotional difficulties are caused by his leaving his family. Placed in strange surroundings when familiarity is important to his security, he is then subjected to a series of different hospital workers who care for his daily needs when one "mother" is a prime psychological requirement. He loses the opportunity to play that normal children possess, and this play is vital to his development and growth. These deprivations have a serious effect and tend to impoverish his personality.

There are many factors contributing to his impoverishment and withdrawal. One is that family ties are often weakened when tuberculosis strikes. The reasons are inherent in the situation. Tuberculosis frequently occurs in large families with low incomes. A low income implies overcrowded housing conditions and close physical contacts with the family. This can lead to more than one person developing tuberculosis. The "breadwinner" may be stricken as well as the child. In this situation the long hospitalization makes the family a welfare case, bringing with it dependency and loss of pride. The mother's visits to the child in the hospital are very infrequent. Smaller children may claim her attention, or attempts to earn money may take up her time. If the mother has tuberculosis, the child will not see her for one or two years. Concretely this means that the child suffers from a loss of parental love at an age when

this love is extremely important to him.

Interrelated with this is the frustration caused by loss of activity. Treatment of the disease makes bed rest essential. This means that much of the motor activity that a child requires in order to develop and grow normally must be limited. Without a rehabilitation program, the need for gross motor movement is sometimes overlooked. Because of a lack of personnel for supervision of the children, some hospitals use restrainers to keep children from climbing out of their cribs. Over a long period of time, this technique may be a contributing cause to curing a lung but with disastrous results to the child's personality. Combine loss of parental care and neglect of psycho-motor drives and there is the danger of the child developing an institutional personality. "Children who have no early mothering experience for one or two or three years . . . all appear retarded, untrained, impulsive, unpatterned in their behavior . . . Once early childhood has been passed without adequate opportunity for normal relationships and personality development, the organization of the personality and retardation in development seems to permit no modification."¹

Furthermore, because of the nature of the disease, the child seldom has the opportunity to find a mother substitute in the hospital. With a damaged lung the child may look and feel well and this may be detrimental to him in winning the sympathy of hospital workers. Not having obvious disabilities or apparent symptoms of severe illness he fails to gain much needed attention and to this is added his difficulty in relating to people. It is not surprising that the hospital worker, untrained in rehabilitation and child care, may be slack in caring for this child. This slackness over a long period of time can be equivalent to neglect.

The problem is intensified as hospital workers find the tuberculosis service undesirable. There is more changing of linens because of bed wetting than on other services. The job of cleaning up occurs often as young children are not capable of blowing their noses in toilet tissues or controlling drooling. Part of the dislike is generated by an indiscriminate fear of infection. This fear is unwholesome as it does not lead to proper precaution but rather creates a negative attitude toward the child. The personnel on other services often tell stories to the children or play with them. On the tuberculosis service playing with the children may be considered an additional duty which is resisted.

The fear of infection upon the part of the personnel and others has an adverse effect upon the emotional development of the tuberculous child. To be held and fondled by a mother or a mother substitute is an essential life need of all small children. "Loving affects his (the child's) capacity to respond to food, vitamins, music, or visual patterns, ideas and ideologies or future goals based on past experiences."¹ The sterile gown that many hospitals insist that visitors wear not only covers the visitors' garments but brings with it a fear and antipathy that is communicated to the child. Consequently tuberculous children are seldom held. In some hospitals parents are told specifically not to hold their children. This policy is sometimes continued when the child no longer has an active infection. As a result of the loss of physical contact, difficulties arise in all areas where an emotional, inter-personal relationship is necessary. "The child's first speech is acquired in imitation of the mother and as the means of intimate contact with her. Toilet training . . . is acquired in intimate interaction with the mother as a sacrifice which the child makes on her behalf to earn her praise."² Living in a hospital when these functions are normally learned retards speech and delays training. Enuresis is common in children who would ordinarily be trained. The speech problems are complicated further when the child has been taught to speak a language other than English at home.

To reiterate, the problems that the tuberculous child faces are based on: (1) loss of parental love, (2) lack of normal activity, (3) the adverse effects of fear of infection on the part of hospital personnel, (4) lack of proper training in personal habits during the formative years.

A SUGGESTED PROGRAM FOR OT'S

I. A. Establish a modified nursery school program. Play equipment for gross motor activity such as steps, boxes, balancing boards should be supplied. Educational toys for fine coordination. Push and pull and musical toys for kinesthetic sense.

B. Developing a "home" atmosphere in the ward. The physical situation of the ward should be pleasant, interesting and stimulating. Emphasis should be on optimum light, bright color, enough space for play area.

C. Supervise the teaching of the activities of daily life when developmentally ready. Proper equipment for child care is necessary, e.g. Child size tables for feeding, adequate bath and toilet facilities.

II. Promote the maintenance of and strengthening of familial ties.

A. Initiate an educational program for parents. Explain to them the need for a close relationship to the child.

B. Work toward liberalizing visiting hours. Make this time a special occasion for the child.

C. Establish a volunteer baby sitters' program in the hospital to allow mothers to bring with them small children they cannot leave at home.

D. Start a drive for conscientious "foster parents" for every child whose parents or relatives do not visit him. A "foster parent" could be anyone who takes a special interest in the child, who sees the child consistently, who can give the child affection and a sense of security. This person could be a worker in the hospital or a volunteer.

III. Make the need felt for a core of permanent workers who work solely on the children's tuberculosis service, who recognize the problems and are in sympathy with the methods used for treatment.

IV. Request student nurses and student occupational therapists to work on the service. The student has time for the extra social touch these children need—a smile, a story, a joke.

V. Collaborate with doctors and nurses to introduce an educational program for all personnel. Correct attitude toward the children should be stressed. Personnel should be supervised to insure the establishment of proper work habits and to see that the teachings of the program are applied.

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U.C.P. SCHOLARSHIPS

In July 1954, United Cerebral Palsy granted a fund of \$15,000 to the American Occupational Therapy Association for scholarships for basic training of undergraduate occupational therapy students. This significant contribution toward increasing the number of well-qualified occupational therapists is deeply appreciated.

The scholarship committee of the American Occupational Therapy Association has made 27 tuition awards to occupational therapy students in 14 accredited schools for the fall semester of 1954-55. These recipients include four in clinical affiliation, seven in advanced standing courses, six seniors and ten juniors. A total of 65 applications were received for consideration at this time. The awards for the fall semester total \$4,616.88.

Scholarships from this fund are being awarded for the spring semester of 1954-55. Further announcement concerning the recipients will appear in later issues of the Newsletter and the American Journal of Occupational Therapy.

SUMMER COURSE

The occupational and physical therapy departments of the University of Southern California are offering two summer courses particularly for occupational therapy. One course, entitled "Advanced Kinesiology for Therapists," is taught by Mrs. Eleanor Ring, Assistant Professor, Occupational Therapy Department. The other course, entitled "Advanced Dissection for Therapists," is taught by Mrs. Roxie Morris, Associate Professor, Physical Therapy Department.

The courses run from June 20 to July 29 and cost \$20.00 per unit. For further information write:

Miss Charlotte Anderson, Chairman
Physical Therapy Department
University of Southern California,
3518 University Avenue,
Los Angeles 7, California.

TODAY'S PRINCIPLES REFLECTED IN EARLY LITERATURE

W. R. DUNTON, JR., M.D.

[Dr. Dunton has long been one of our able supporters and advisors and was editor of *Occupational Therapy and Rehabilitation*. In this short article Dr. Dunton again gives us food for thought by showing influences that led to the forming of our profession. Our development, though recent, was by emulation of thoughtful and judicious leaders under whose guidance our needs and purposes were fulfilled.]

In the application of occupational therapy to mental patients, the interest of the patient must be stimulated. Webster defines the form of interest under discussion as: "Excitement of feeling, whether pleasant or painful, accompanying special attention to some object: concern."

The method of stimulating such interest will vary with many factors, chiefly with the type of psychosis, the patient's educational and cultural background, and the manner of presentation of the craft, or other occupation, by the therapist.

It is of interest that some of the older psychiatrists have emphasized this fact in their writings. One of the most specific of such may be found in the section on "Hospital Treatment of Insanity" in Hare's *System of Practical Therapeutics*, published in Philadelphia in 1892, by J. B. Lippincott and Company. This section was written by Dr. Edward N. Brush, then assistant physician in charge of the department for men of the Pennsylvania Hospital's mental department. In 1891 he was appointed superintendent of the Sheppard Asylum, now known as The Sheppard and Enoch Pratt Hospital, Towson, Maryland. Presumably this section may have been written six months or a year before the date of publication.

The first part of the section is given over to a description of the general milieu of hospital environment and then discusses:

"OCCUPATION. The question of occupation is, with physicians connected with hospitals for the insane, an ever-present one. With some it becomes a minor and subordinate element in hospital-life; with others it becomes the predominating idea. Between these the golden mean is situated. Occupation is undoubtedly of very great importance in the treatment of the insane, but the idea of occupation which is satisfied by putting a row of twenty demented to picking hair or making fibre mats is as far short of the true aim of occupation as is the attempt to get labor out of cases of acute mania or melancholia already subject to exhaustive changes and waste—a misconception of its true value."

The following paragraph is omitted in the second edition published in 1901. The Scotch medical superintendent referred to was probably T. S.

Clouston, whose son, T. Storer Clouston, was a barrister, I believe, who gained some fame as a writer by his several books describing the adventures of *A Lunatic at Large*.

"An eminent Scotch medical superintendent once told me that he had at one time declined to take a certain patient, a lawyer, who had become insane from overwork until he had impressed upon the friends the point that if he saw fit he should set his patient to digging ditches and wheeling dirt with a barrow. Possibly in the case in question the time came when it was best for the patient to do these things, but not until the physical tone had in a measure been renewed—not until a balance had been approached between waste and repair. These accomplished, it is evident that for the too-active mind of the distraught barrister some occupation that almost precluded mental activity was desirable, and certainly wheeling dirt in a barrow and digging ditches do not demand active mental work.

"The benefits of occupations are manifold. Primarily, even the most simple and routine tasks keep the mind occupied, awaken new trains of thought and interest, and divert the patient from the delusions or hallucinations which harass and annoy him. Moreover, nearly all occupations, especially those of an outdoor character, call for physical exertion, which patients in certain stages of insanity cannot be induced to put forth in any other way.

"For the tired, overworked farmer or farm-laborer, who for years has been at the dull treadmill of daily toil, agricultural labor would not be indicated. Rather give to him tasks which awaken new ideas and open new fields for thought. On the contrary, the dwellers in towns—the clerk, the merchant, the lawyer—are to be encouraged to engage in farming and gardening, the care of flowers, the improvement of the hospital lawn. Men with trades are too few in most asylums to permit the introduction of many industrial occupations in which they could be interested, but printing, light carpentering, wood-carving, etc., can with advantage be used as adjuvants of treatment. It should not, however, be lost sight of that these are all in-door occupations, and the trades of the patients engaged in them have possibly some disagreeable associations connected with their mental disturbance, and recreation and diversion should be ensured to those so occupied.

"Cases of acute mania and of early paresis, if permitted, will often overwork because of too

great ambition or some extravagant delusion of power or peculiar ability. Patients with melancholia will also, from a too sensitive conscience or a belief that they must earn their support, which they think is costing a fabulous sum, need watching lest they do themselves harm from overwork.

"Occupation, aside from its remedial value, has a value in the general disciplinary conduct of a hospital, as it affords a channel into which the excessive activity and nervous energy of many restless and chronic cases may be safely diverted.

"RECREATION. Recreation in the treatment of insanity, as elsewhere, is to be distinguished from mere amusement. It should be something into which the patient can himself enter, which awakes his mental and physical activities, one or both, and which at the same time does not unduly excite or fatigue. For out-of-door recreation tennis, croquet, baseball, cricket, and similar games may be followed. Patients who for any reason cannot engage actively in these may be made passive participants in various ways, as umpires, score-keepers, etc. A tournament or a series of sports with a well-arranged programme, which may with advantage be announced for days in advance, and thus afford an interesting topic of discussion and arouse mental activity in healthy directions, can with great profit be introduced on occasions during the summer season.

"For in-door recreation the task becomes more difficult, and commonly narrows itself down to the ordinary round games. The spelling-matches so popular in the country a few years since would seem to suggest at least one variation from the common routine.

"PHYSICAL CULTURE. The age is eminently one of physical culture, and fortunately the prevailing fashion has taken root in many of our asylums and hospitals for the insane. Aside from occupation—and on a line with it—nothing could be of greater value than well-conducted, judiciously directed physical exercise. It has its physical, mental, and according to the experiences at the Elmira Reformatory, its moral influences for good.

"No one who has seen the interest which can be aroused, in cases of chronic dementia even, by patient physical training, the use of dumbbells, Indian clubs, and the wands, can doubt the value which may be derived from the same source in cases of melancholia and in the mental and physical inactivity, with deficient capillary circulation, and a tendency to obesity, marking a period which may thence lead to convalescence or dementia.

"It has been remarked that many cases of melancholia and certain of so-called stuporous insanity, or insanity of the confusional type, are shallow breathers. They do not sufficiently oxygenate the blood. For these the dumbbells, the clubs, or

better still, in some cases, the chest-weights, set up deeper respiratory movements, improve the circulation, and aid in the elimination of waste and poisonous products which are active or concomitant causes of the mental disturbance.

"Military drill of a modified type comes naturally under this head and will be found of even more extensive applicability than gymnastic exercise, as patients who cannot be trusted in the gymnasium or who are difficult to control can be induced to go through the manual with a very fair degree of regularity. The drill not only acts as a form of exercise and a mental recreation, but it has its advantage in a disciplinary way if the drillmaster is one who understands his work and his patients.

"AMUSEMENTS. Amusements should not be lost sight of in the enumeration of the remedial measures to be brought into play in caring for the insane. The sane mind enjoys laying aside the cares and perplexities of the hour and being simply amused. In the theatre or opera the outside world is forgotten; the music scene becomes real and supplants all else. Many institutions have distinct buildings devoted to purposes of amusement. Theatrical performances, concerts, negro minstrels, lectures, views shown by the stereopticon, constitute some of the means which may be brought into use. These are of undoubted value, and may with benefit be enjoyed by all classes of patients."

It seems somewhat remarkable that a document written over sixty years ago should so admirably express the principles of occupational therapy in which we believe today. But Dr. Brush was a most intelligent man with a keen and alert mind and it is possible that he saw a little further than did some of his contemporaries. Yet there have been many men with fine minds who have devoted their lives to the care of mental patients, and who have recorded their observations. Perhaps we would gain in knowledge more quickly if we could be more familiar with what has been recorded in the past.

HONORS

At the annual conference held in Washington, D. C., in October, 1954, Miss Marjory Taylor and Miss Helen Willard received distinguished service certificates for their loyalty and unselfish devotion to the development of the American Occupational Therapy Association.

No two people have had a longer or more important role in our profession and their influence has always been felt, appreciated and welcomed. The tribute in a small way expresses the esteem the two so richly deserve.

ACTIVITY GROUP THERAPY

BERNICE R. BOBIS, O.T.R.
ROBERT M. HARRISON, M.A.
LEO TRAUB, M.D.*

This is a report of an activity group therapy project which was carried on at the Veterans Administration Hospital, Palo Alto, California, from January, 1951, to January, 1953. The project grew out of staff discussions¹ concerning the efficacy of group therapy with chronic psychotic patients in this 1,400 bed neuropsychiatric VA hospital. Prior to, as well as during the progress of the project, a number of supportive verbal therapy groups were meeting on the continued-treatment-service. These verbal groups had met with a measure of success in helping patients to socialize, to develop ego integration and in some instances to reach a level of improvement at which they could return successfully to community living.

In considering ways of modifying therapeutic approach, it was recognized that many of the chronic psychotic patients on this service were severely impaired in their ability to communicate. Most of them were able to verbalize to some extent, but a large number talked little and many spoke in schizophrenic jargon which the leaders found intelligible only to a limited degree. Discussion of the limitations of verbal group therapy with these patients led to experiments with the use of group activities. Two activity therapy groups² were established, the first of which is the subject of this paper.

The project as structured was follows: occupational therapy was to be the main approach, although it might be supplemented by other types of activity. It was decided that the primary group leader would be an occupational therapist. Other leaders would be social workers, one man and one woman,³ who would participate along with the patients in some of the sessions in order to stimulate interaction and to further the development of group feeling. It was anticipated that the relationships established by the social workers might be utilized in individual social casework with the patients as the need for this developed. The ward psychiatrist would help in the selection of the patients and serve as consultant throughout the project.

As put into operation, the project differed from usual occupational therapy activity in this hospital in the following ways:

(1) Membership in the group was limited to a maximum of fifteen patients and as far as possible the group was kept constant in order to promote the development of group feeling.

(2) Social workers participated in the activity as a part of the group to aid in stimulating group interaction and in strengthening group feeling and to develop positive relationships which might be used in individual casework.

(3) Leadership was kept constant.

(4) The time and place for the meeting were kept constant.

(5) The project was planned for a minimum of one year but actually continued for two years.

(6) Special effort was made to evaluate the progress of individual patients and the development of group feeling and identity, both within the group situation and on the ward.

(7) Other activities in addition to occupational therapy were carried on in accordance with special interests of group members.

Continuity of membership was maintained through the entire two-year period, even though at one point this involved the transfer of the entire group (personnel and patients) from one ward to another. The only patients who left the group during the period were those who were found to be unable to fit into the group, a few who were graduated into other special activities and those who improved sufficiently to leave the hospital.

The occupational therapist met with the group three times weekly for an hour and a half period in a fully equipped OT area. Each of the two social workers participated regularly one day a week on different days. After the sessions it was usual procedure for the therapist and social worker to discuss developments in the group and plans for the future. The occupational therapist and the two social workers also conferred frequently with the psychiatrist regarding progress of the group and of individual patients, and problems of leadership and approach.

In the beginning the occupational therapist selected most of the activities. Various items were made for the ward, such as ash trays of ceramic material or wood, a bulletin board, book-cases and flower boxes. The patients were encouraged, however, to express their own preferences and when practicable were given the opportunity to carry them out. In order to test the patients' skills and powers of concentration, and to provide a medium in which most of them would meet with initial success, ceramics was chosen as the first activity. The completed pieces turned out by hand were not only usable but many were cleverly done showing imagination and expressiveness. Later the same skills were incorporated in such hospital-wide chores as constructing wooden boxes, folding holiday menus and

*Miss Bobis is an occupational therapist; Mr. Harrison, a case supervisor in social service; Dr. Traub, a staff psychiatrist at the Veterans Administration Hospital, Palo Alto, California.

programs, helping to stuff envelopes and making poppies.

At first the patients were seated around two large tables in a formal manner with their necessary working material close at hand, each having his own tools and equipment. They seemed strained and unfriendly, wondering what would happen next. One meek and awkward man would look at his lump of clay, pick it up and roll it into a ball and then place it down again, not working or communicating with anyone or moving from his assigned spot. Another's finger would shape the clay into a form that momentarily pleased him then destroy it only to try again. Another just liked beating the lump with a clay tool in a sloppy fashion, not wishing to touch it with his hands. Still another molded it into an impressive-looking piece.

It took about three months for the patients to become comfortable in the situation and for signs of group feeling to appear. By this time some of the members entered the OT clinic with a "hi" or "howdy" and about half the patients would voluntarily seek out tools and equipment which were now being shared by all. There were still some patients who preferred to stay on the outskirts of the group but eyed, with interest, the area where the majority were working together. Opinions and suggestions about what to do and how to do it were freely exchanged among staff and patients. As patients began to relate to one another and to the leaders, feelings of hostility, affection and aggression began to show. In dealing with the group, the OT leader tried as far as possible to give individual assistance where it was most needed and, with a consistent, friendly, accepting attitude, to help patients work through these feelings. Group projects were emphasized with patients working together or doing different parts of a project. Suggestion was used a great deal by the occupational therapist—steady, gentle urging to participate in the group or group project. The occupational therapist and social workers were constantly watching for verbalizations should the patients reach a point where they wished to talk.

In addition to the occupational therapy activities, the group was able to take advantage of other forms of socialization and activity in planned outings and picnics at nearby scenic sites. Birthdays were celebrated within the group with the usual treats and best wishes. Waffle parties and popcorn feeds were held on holidays and the group occasionally went on short hikes and bicycle rides on the hospital grounds and made use of the hospital gymnasium.

A big outing was the Christmas shopping trip into nearby Palo Alto. This meant issuing money to the members of the group, having them dress in their best, accompanying them on the bus to and from town and seeing that no one got lost or

upset along the way. The occupational therapist, the two social workers and the ward psychiatrist participated in the trip which proved so successful that the patients asked that it be repeated.

Shortly after this outing a patient made his first request to go into San Francisco on a pass. We later learned that he had been job hunting. This patient was a very quiet, withdrawn, distantly polite man. Prior to the project he had habitually sat in his chair on the ward, facing the wall, without apparent interest in his surroundings. When the social workers approached him about joining the group, the patient was hesitant but agreed to give it a try. In the group area he was neat in dress and superior but polite in manner. This patient did not speak with patients in the group, but responded courteously to the leaders when they approached him. At the request of the occupational therapist, he designed a magazine rack, constructed and painted a flower box and a beautiful ash tray. His decorative designs were used by other patients on their wood projects. He constructed a wooden file box for the ward doctor and a shopping cart for the women's area. Also he did much of the lettering for the "hospital day" exhibit of social service. Since he had been given group privileges recently, he helped to put up this exhibit. The leaders spent only very short periods of time with him during the group sessions since conversation was difficult to maintain and he gave the impression that he would like to get back to his work immediately. In the group situation he received considerable recognition for his good work and gradually seemed to grow more comfortable. During the second year the ward psychiatrist and the social worker helped him to move out into a successful home-care placement. He came back to the hospital during the day for a special work assignment. He was looking for outside work under the guidance of the hospital vocational counselor when a physical illness necessitated his readmission to the hospital.

Another patient, when first approached by the occupational therapist to participate said, "I can't," but later with encouragement said, "I'll try." He is now living outside the hospital and freely admits that is where he wants to stay. This large, slow-moving, self-deprecative, self-conscious, timid man was almost afraid to talk when he joined the group. As he became more comfortable he began to joke with the occupational therapist and commented that she reminded him of the "girl I used to pull taffy with." He helped more and more with such shop chores as making coffee, passing cookies and cleaning up the area. After this patient had been given ground privileges he went to the canteen to buy cookies for the group. He used his own money many times to "treat" the group and the leaders. When it was first suggested to him that he play the accordion he re-

fused, but after being urged by the members and the leaders he finally consented and thereafter played at parties, picnics and song sessions.

This patient had had an extremely harsh, crude and domineering father. In the group situation, when the patient was able finally to make friendly overtures to the male social worker, he seemed to gain in self-confidence and strength, and shortly thereafter left the hospital for a home-care placement.

Some patients eventually were moved to other groups of a different nature as their need indicated. For instance one patient who had developed a relationship with the occupational therapist, finally became secure enough to ask for "man's work" and was given ground privileges with assignments in the carpentry shop and the garden. Another patient who had been previously sitting in anonymity in a large ward of chronically ill patients, without making any requests or complaints, finally reached a point in the group where he could express an interest in studying accounting. He completed several courses in accounting with the help of the educational therapist and became a messenger for the physiotherapy department. At the beginning of the project, this patient was shy and retiring, hesitant and fearful of starting to work and anxious to do what was right. He talked very little although he answered questions relevantly. When encouraged to work in ceramics and basketry, he had to move very slowly but tried hard to do things for himself. The occupational therapist was patient, never tried to hurry this patient and assisted him in all his work. He is now much more happy and is active within limits set by a moderate muscular rigidity due to Parkinsonism. Lack of funds is the only obstacle to a home-care placement.

When the project started, it was considered necessary to have a ward aide present because a few of the patients were quite hostile and paranoid and had on occasion been assaultive or destructive. One of these patients seemed to trust no one in the hospital and became quite disturbed when any attention was given him. Within a few months he was relating well to the occupational therapist and later this acceptance included the male social worker. His productivity in the OT clinic had ups and downs. Sometimes he would work with the group, and later destroy what he had made. On occasion the occupational therapist was able to play cards with him (according to his own rules). The patient eventually was able to tolerate other patients and personnel in three-way card games and conversations and to converse with other patients in the group. Only after approximately a year with the group did he show a lessening of suspiciousness on the ward and greater friendliness to personnel. He was able, finally, to

undertake an activities program on his own initiative.

Before the first year had passed the patients had reached a point where the ward psychiatrist and leaders decided that the presence of an aide in group sessions was no longer necessary. Such results indicate that the OT activity group has contributed to a threefold goal:

- (1) To provide better socialization and interaction among the members through an activity and, whenever possible, to extend the positive feeling into other hospital areas. (Patients usually began to relate positively to the leaders, then to other members of the group and finally to personnel and patients on the ward and elsewhere in the hospital.)

- (2) To help prepare as many of these chronic psychotic patients as possible for a home-care situation or other extramural adjustment.

- (3) To give the patients the satisfactions of productive accomplishment. During the two-year period a total of thirty patients were in the group, ranging from nine to fifteen at one time. Of this number, six improved sufficiently to leave the hospital and live in private homes in family care. The least successful were ten patients who had to be dropped from the group after it had become apparent that they were unable to relate to leaders or members of the group or that they were not able or ready to participate in the activities. The remaining fourteen fit between the two extremes. These fourteen showed improvement, some only in the activity group area, but most of them in over-all hospital adjustment. Eleven of the fourteen were able to obtain ground privileges. All of these were chronic cases of long duration and since they first showed a higher adjustment level in the activity group setting, it is felt that the group played an important role in their improvement.

SUMMARY

In many respects this project resembled occupational therapy as it is usually practiced in this Veterans Administration neuropsychiatric hospital. In the following ways, however, it differed from usual occupational therapy. The time, the place, the leadership and the membership were kept as constant as possible over the two-year period. Emphasis was placed on the development of group identity and group interaction and feeling. Special effort was made to involve the patients in cooperative activities. Social workers related to the patients in the OT setting and participated with them in the activities thus contributing to the development of group feeling, and in addition establishing relationships which were sometimes productively used in casework planning.

(Continued on page 50)

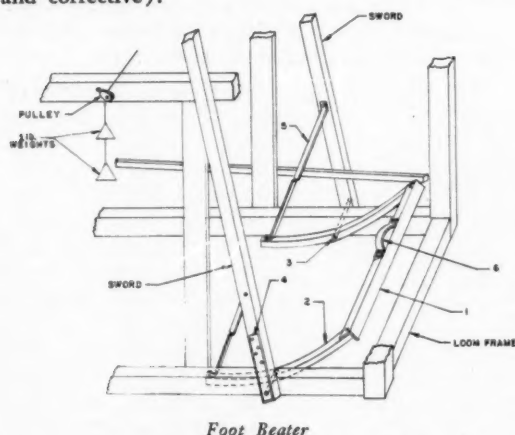
ORTHOPEDIC FLY SHUTTLE LOOM

An Adaptation¹

ARDIS A. GABEL, O.T.R.²

A therapeutic adjunct which is a potential medium for treatment of a variety of disabilities is presented with the hope that other therapists will find it advantageous or stimulating.

The adapted floor loom's general utility is embodied in its (a) Simplicity and ease of adjustment to meet the individual needs of a patient. (b) Compactness which maintains the standard floor loom functions plus the advantages of the adaptations. (c) Provision for integration of treatment programs with other therapists (physical and corrective).

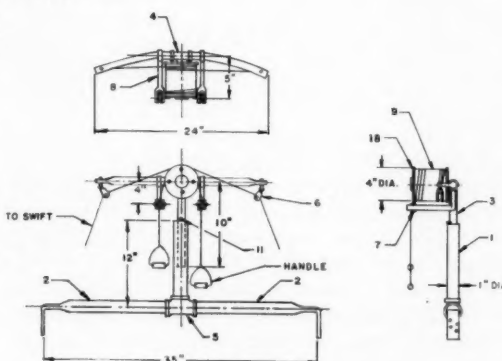


Foot Beater

Occupational therapists are particularly familiar with the standard four harness floor loom which is normally a part of the clinic equipment.

Thoughtful craft analysis shows it is necessary to use most of the musculature of the body in varying degrees of facility to weave. However a standard floor loom limits maximum treatment in range of motion, in resistance within that range, in kinesthetic training (or consciousness and ease of one's own muscular movements without excess compensation) and in sustaining curiosity and interest. Many successful adjustable beater or batten handles both in graduated sizes and heights are widely used. Ingenious and successful resistive devices on beaters and treadles for individual patient needs of upper and lower extremities are no exception. All these aids to successful treatment often require precious storage space, frequent equipment building, constant position or adaptation change, plus time and energy spent by the therapist and the patient.

No solution to all these problems is offered or intended. Instead a workable idea is presented which may help therapists and primarily promote a speedier recovery of patients.



Pulley Control System

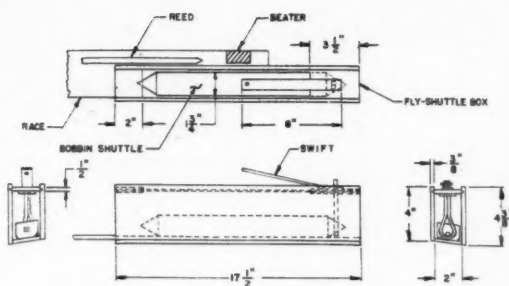
DESCRIPTION

A standard 34" Hammond 4-harness floor loom is used for this adaptation. Any similar floor loom could have been used. A double expanding or extension T bar with an adjustable pulley controlling the throwing of the shuttle is mounted on the loom uprights. Next a fly shuttle race is fastened to the beater frame in front of the reed. On the back of the beater on a rope extending through a pulley, weights are attached which act as a counter balance and as a resistance. A foot beater (a U-shaped rocker treadle) is welded to the base of the swords. Two sets of holes six inches apart and off center are drilled through this bar for the accessory foot stirrup.

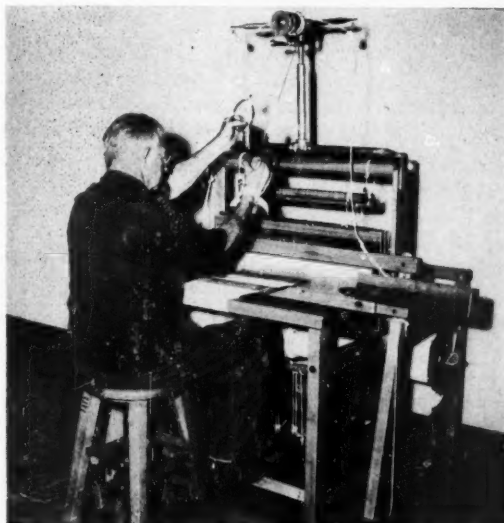
GENERAL DIRECTIONS

1. Seat patient on a stool, bench or chair, whichever is suitable in relation to the disability and will assure good posture and ease of motion.
2. Place foot on treadle (tie up two harnesses to each treadle).
3. Grasp pulley handles (the crossbar that has the wooden roller attached to it can be extended as the shoulder range of motion increases) and pull down on elevated handle. This shortens the rope fastened to the opposite swift shuttle box and sends bobbin through the shed to the other side.
4. The foot beater or U-shaped rocker treadle is pushed down with the same or opposite foot used in Step 2. For lower extremity depressor action, additional weights may be used on counter

1. This loom adaptation received the Southern California Occupational Therapy Association's first annual award in 1953 for outstanding work in occupational therapy in the field of physical disabilities.
2. From Veterans Administration Center, Los Angeles, California.



Fly Shuttle Race



The orthopedic fly shuttle loom showing use of hemiplegic glove.

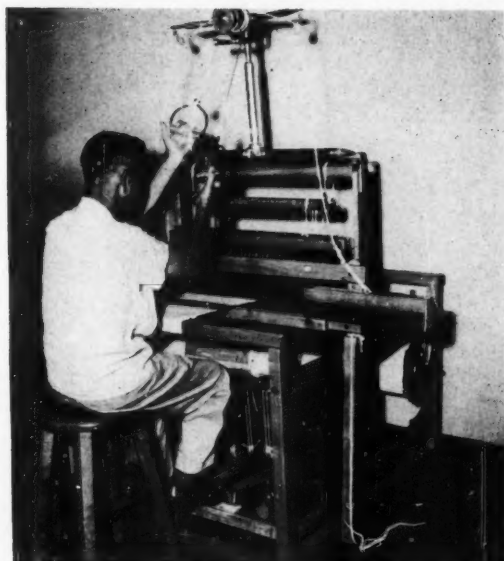
balance. For activation of elevators, the foot is placed in an accessory stirrup to lift beater into original position. As range of motion and control increases, build up stirrup with wooden wedges.

5. Same as Step 2. Change treadle.

6. Same as Step 3. The hemiplegic glove is sometimes necessary to help a patient grasp the handle continuously.

From the general directions many innovations are possible, making it applicable to many situations. An example would be a left hemiplegic with limited muscle power and control of arm and flaccid hand. The hemiplegic glove would be used to strap the hand to the pulley handle. The right arm would pull the left up, holding it there until the reciprocal action trip. The weight of the arm is eliminated, reducing tension and therefore pain. Kinesthetic and neuro-muscular training is activated. The wrist might alternately rotate from pronation to supination. A diagonal pattern is easily accomplished by crossing the

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The orthopedic fly shuttle loom with the foot stirrup accessory.

pulley handles. The lower extremity might need general strengthening and would execute treadling and beating. Fatigue diminishes as coordination and power develop endurance.

In eight months this loom has been in use by twelve chronic neurological patients. Each has benefited favorably in a comparatively short time. However a detailed progress report of each patient will not be included herein.

The floor loom adaptation resulted as an effective and integrated treatment medium after careful study and valuable experience. The full range of motion, primarily of the upper extremities, and its relation to the complete picture of neuromuscle training is very important. On examining this adaptation, it is necessary to keep in mind the general purposes of muscle training and the desirability of the maximum arc or range of motion. These include:

1. Maintaining an improved circulation nutrition.
2. Maintaining muscle tone and prevention of degeneration and atrophy of muscle fibers from disuse or from joint adhesions.
3. Strengthening muscles whose nerve supply is unimpaired although weakened due to disuse or injury.
4. Coordinating the remaining nerve centers where partial destruction of controlling centers has taken place.
5. Re-educating the habit reflex through repetition of the normal movement, thus increasing the strength of the whole muscle.
6. Developing coordination and control.

The orthopedic fly shuttle loom with the fully controlled shuttle and treadle beater aids development of a full range of motion. It promotes stretching, it provides diagonal patterns exercise, gives normal working position and aids kinesthetic

FOOT BEATER

Quantity	Item	Size	Description	Drawing No.
1	Angle iron	$\frac{1}{4}$ " x $1\frac{1}{4}$ " x $1\frac{1}{2}$ " x 33 $\frac{5}{8}$ "	Foot beater	1
2	Angle iron	$\frac{1}{4}$ " x $1\frac{1}{4}$ " x $1\frac{1}{4}$ " x 21"	Foot beater	2
2	Metal rods	$\frac{3}{8}$ " x 6"	Weld sword and rocker together through the loom frame.	3
2	Metal strips	$\frac{1}{4}$ " x $1\frac{1}{4}$ " x 7"	Part of welded unit	4
2	Metal braces	$\frac{1}{4}$ " x $\frac{1}{2}$ " 17"	Beater brace	5
1	Aluminum strip	$\frac{1}{8}$ " x $\frac{3}{4}$ " x 11"	Foot stirrup or handle	6
	Screws			
	Wingnuts			
	Weights			
	Rope			

FLY SHUTTLE RACE

Quantity	Item	Size	Description
2	Hardwood	$\frac{3}{8}$ " x 4" x $17\frac{1}{2}$ "	Shuttle box front
2	Hardwood	$\frac{3}{8}$ " x $4\frac{3}{8}$ " x $17\frac{1}{2}$ "	Shuttle box back
2	Hardwood	$\frac{1}{2}$ " x $2\frac{1}{2}$ " x $3\frac{1}{2}$ "	Swift block
2	Hardwood	$\frac{1}{2}$ " x $2\frac{1}{2}$ " x 2"	Shuttle box stop-block
1	Hardwood	$\frac{3}{8}$ " x 4" x 45"	Race track
2	Leather	$\frac{1}{4}$ " x $\frac{1}{2}$ " x $8\frac{1}{2}$ "	Swift block Bobbin loop
2	Leather	$\frac{1}{4}$ " x $1\frac{1}{4}$ " x $1\frac{1}{4}$ "	Bobbin loop stabilizer
2	Leather	1" x 8"	Swift strap
2	Bolts with Nuts	$\frac{1}{4}$ " x $\frac{3}{4}$ "	Lock Swift parts together
1	Metal Tipped Bobbin Shuttle	11"	
	Glue		
	Nails		

PULLEY CONTROL SYSTEM

Quant.	Item	Size	Drawing Number
1	Pipe	1" x 12"	1
1	Pipe	1" x 41"	2
1	Pipe	$\frac{1}{2}$ " x 10"	3
1	Pipe	$\frac{1}{2}$ " x 24"	4
2	T	1" and $\frac{1}{2}$ "	5
2	Pulleys	$\frac{3}{4}$ "	6
2	Guide rollers	$\frac{3}{4}$ "	7
2	Arm brackets	$\frac{1}{4}$ " x $\frac{1}{4}$ " x 4" x 5"	8
1	Wooden roller	$3\frac{3}{4}$ " diameter	9
1	Bolt	$\frac{1}{2}$ " x $4\frac{1}{2}$ "	9
2	Metal faceplates	4" diameter	18
2	Handles	Stirrup type	
1	Set screw for adjusting height of cross-bar		11
	Nylon rope for pulley system	$\frac{3}{16}$ " diameter	

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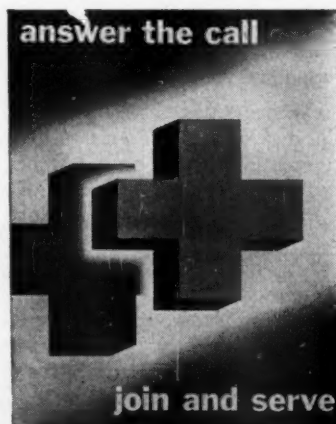
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training of the upper extremities through active assistance to resistive exercise. It also encourages and produces improved balance and posture of the trunk which in turn effects improved breathing.

Clinical observation of patients showed increased curiosity and sustained interest in weaving. Possibly this was due to a greater challenge offered by the device and its mechanical, physical and mental appeal.

ACKNOWLEDGEMENTS

1. For aid in construction: the Veterans Administration Brace Shop, Los Angeles (25), California.
2. Photography: courtesy of Veterans Administration Photography Lab., Los Angeles (25), California.
3. Shuttle Race construction: the Manual Arts Therapy, Veterans Administration, Los Angeles (25), California.



NATIONALLY SPEAKING

From the Executive Director

The "Nationally Speaking" column has become "Internationally Speaking" this fall, carrying as it has in successive issues, reports on two of the congresses convening in Europe this past summer: first world congress of the World Federation for Occupational Therapists and the sixth congress of the International Society for the Welfare of Cripples. I wish it were possible to convey to the readers the stimulation and rich experience of attending two international meetings within weeks of each other, for it gives a perspective to our own domestic scene and enables us to gain a new and refreshing appreciation of the vast area encompassed by our world community of interests.

"Changing Attitudes in a Changing World" was the theme of the congress of the International Society for the Welfare of Cripples as 700 persons from 36 countries assembled in The Hague, Netherlands, September 13-17, to share the opportunity of meeting with their co-workers from all parts of the world and to exchange information concerning all aspects of work for the handicapped. It was particularly appropriate that 16 occupational therapists from five different countries were present at The Hague because it was due to the initiative of occupational therapists at a previous world congress of the ISWC (Stockholm, 1951) that the establishment of the WFOT stemmed and flowered into actual existence at the Edinburgh congress in August.

This brief sketch will bring you a few highlights of the meeting at The Hague. The keynote address at the opening session, "A World Wide View: Improving Attitudes and Services for the Crippled," given by a member of our own AOTA Board of Management, Dr. Henry Kessler, fitted the dramatic occasion on a colorful stage with the flags of all nations beside the delegates from each country. The well integrated program comprised general sessions, sectional meetings and field visits of interest to each professional group as well as lay persons engaged in rehabilitation work. Topics and speakers in the general sessions included dynamic rehabilitation by Dr. Howard Rusk (NYU Bellevue Medical Center), organizing international services for cripples by Mr. Kurt Jansson (United Nations, Rehabilitation Unit), our new attitudes toward the crippled by Dr. William Sanger (Medical College of Virginia). The sectional meetings (grouped as medical, social, educational and vocational) carried pertinent presentations and discussions by noted world-wide personnel on medical and auxiliary services: spinal paraplegia, cerebral palsy, amputees, special

schools, parent education, public relations and fund raising.

It was gratifying to note that occupational therapy received consistent mention in the general and sectional papers. There were two opportunities for specific presentation of OT. Among the proffered papers selected for reading was that of Miss Mary MacDonald, Principal, Dorset House School, Oxford, England. Miss MacDonald described, in a well stated and provocative paper, the method used in Britain for working out the problem of disposal of goods made by handicapped persons in their homes or sheltered workshops. It is likely that this paper will be published in the proceedings of the congress. I had the privilege, as designated representative of the World Federation of Occupational Therapists, to briefly address the general session presided over by Mr. Kurt Jansson, Chief, Rehabilitation Unit of the United Nations. Comment was made on two points: (1) development of WFOT and reference made to the first world congress recently convened in Edinburgh, (2) the markedly varying interpretations of occupational therapy as expressed by representatives of the countries present and our recognition of the cause and consequent need of clarifying our objectives.

Resolutions passed by the congress at the final meeting were an indicative summary of the thinking which had transpired. Three of these are of particular interest to us. *Medical services*—believing that the integration of all of the many medical and related skills into the rehabilitation concept requires further study, the congress advocated that a special section on this question be included in the next world congress. *Homebound*—the congress stated that adequate services for the homebound disabled are lacking in many areas and recommended that additional attention be directed to this problem, with the employment of well trained staff to insure necessary services. *Vocational rehabilitation*—action taken by the International Labour conference to develop international standards of vocational rehabilitation was noted with approval and the hope was recorded that such standards would result in the provision of suitable employment opportunities regardless of the origin of disability.

The clinical visits, or "excursions" as they were called, included trips to adjacent orthopedic clinics, special schools, sheltered workshops and rehabilitation centers. An extension of the field visits centered in a week's study tour immediately following the congress which a number of persons joined including several of the occupational therapists. The tour circled through England and studied

active programs in well known places such as Vauxhall Motor Works Rehabilitation Center, Papworth Village Settlement, Berry Hill Miners' Rehabilitation Center.

The "extra curricular" activities, featuring films, exhibits and social functions, filled a profitable and enjoyable place. Outstanding was the generous patronage of Her Majesty Queen Juliana of the Netherlands when she attended one of the sessions and was later honored at a luncheon given by the Council. An OT cocktail party at which the AOTA and Joint Council of Great Britain were hostesses, preceded the official dinner of the congress during which the first Albert Lasker Awards for distinguished international services for the physically handicapped were presented to Dr. Henry Kessler, the Right Honorable Viscount Nuffield (England) and Dr. Juan Farill (Mexico). Recipients received a beautiful statuette symbolizing victory over disability and a monetary grant of \$1,000.00.

The exhibits from Greece, CARE, Brazil, Cuba, France, Denmark, England and the United States were among many demonstrating interesting aspects in patient management and care from treatment and administrative levels. The excellent U. S. exhibit on self help devices, prepared by Miss Muriel Zimmerman, O.T.R., was well received and had appeared the previous months at the International Poliomyelitis conference in Rome and at our own Edinburgh congress.

A splendid program of films shown during the week comprised outstanding films in the rehabilitation field produced since 1951, intended for professional or lay audiences but judged for their international utility. "A New Beginning," filmed at the Institute of Physical Medicine and Rehabilitation, New York, was awarded top honors, with honorable mention to the films from Switzerland, South Africa and Denmark.

This report would not be complete without mentioning those persons under whose leadership the International Society for the Welfare of Cripples will be continuing, and those responsible for the success of the congress. Dr. Howard Rusk, director of the Institute of Physical Medicine and Rehabilitation, New York University—Bellevue Medical Center, was elected president of the ISWC for the next three year term. Mr. Donald Wilson, secretary general of ISWC, and Mr. Norman Acton, his assistant, by their superb work, contributed much to the excellent results of this first world meeting of the sixth congress of the International Society for the Welfare of Cripples. We also say thanks to the Dutch people, our hosts, who proved that you have to go a long way to "beat the Dutch." Wholesome, stolid, fun loving, adventurous, resourceful—their engineering feats achieved in conquering the sea in their picturesque

land equal those to be found anywhere in the world.

And so, the congress at The Hague came to a close and the hundreds of us privileged to attend turned to face the homeward direction having learned much from those in countries that have both more and less than we. Each of the hundreds realized that the globe we were about to encircle in that homeward trek no longer represented just THE world, or MY world but OUR world.

Marjorie Fish, O.T.R.
Executive Director.

From the Education Office

The new official report of performance in student affiliations (RPSA) went into effect on January 1 of this year replacing the clinical training report. The new report form has been made possible through the cooperation of all occupational therapists responsible for student training who used the experimental form along with the old official form.

Comparative analyses of the two report forms which were used concurrently for each student from July 1, 1953, to July 1, 1954, pointed up the superiority of the experimental form to the old official form as a student affiliation evaluation report. The experimental form allowed for a more definitive and accurate statement of a student's performance. It also resulted in a greater distribution of scores for all students in training by furnishing a wider range of values to be assigned to varying degrees of performance, thus lessening the "pile-up" of high scores previously found in the clinical training report. For example, 11% of the students who rated in the upper half of the old official report form score scale rated in the lower half of the experimental report form scale for the same affiliation. The combined use and scoring of two different types of evaluations—individual, observable performance as well as the comparison of this performance with that of other students—in the experimental form helped secure the desired score distributions.

At the 1954 midyear meeting in Indianapolis it was voted that the experimental form be revised for official use by a special committee, to replace the clinical training report. This committee consisted of occupational therapists from clinical centers representing the five major disability areas and directors from schools of occupational therapy. To aid its deliberations, comments were requested and received from occupational therapists who are responsible for training students as to specific content in the experimental form as well as certain aspects of the evaluative or scoring procedure. These comments included changes which would

definitely improve the validity of the form and increase the accuracy of the evaluative procedure. The "behind the scenes" activities of this hard-working committee in revising the experimental form will be described in this article.

The first step was the consideration of the objectives of a student report form as well as the philosophy of the format and the development of the experimental form. The report form must represent a job analysis of student performance in student affiliations. To secure a proper balance of all factors involved in student performance, all content must be: (1) relevant, (2) important, (3) suitable in terms of the level of performance expected of students, (4) comprehensive in coverage, (5) understandable by student and (6) accurate. The criteria with regard to the specific formulation of each statement, trait or component are: (1) universal applicability to all types of student affiliations, (2) observability of the behavior under most circumstances by any and all supervisors, (3) objectivity of reporting the behavior as having occurred with a given frequency, (4) equality of meaning of language used (both clarity and singleness of concept) and (5) lack of overlapping so that the same behavior would not be evaluated twice.

In accordance with the above criteria, and after a careful review of all recommendations received from the field as well as the statistical analyses of the experimental report form, the committee formulated a proposed revision. The resulting report form was then sent to all members of the education committee, the subcommittee on schools and curriculum and the subcommittee on student affiliations for further evaluation. On this basis it was prepared for submittal to the education committees at the 1954 annual conference. With slight revisions, the report of performance in student affiliations was given final approval at this meeting and it was recommended that it be put into official use on January 1, 1955, replacing the clinical training report.

With this brief picture of the development of the new official form, let us now consider its content as it differs from that of the experimental form and how it affects you as a school director, clinical director or student.

Part I now consists of twelve traits which are deemed essential to student performance in occupational therapy. They are applicable to all students in all occupational therapy departments. Each of these traits has been defined in terms of its manifestation in occupational therapy performance. Under each of these twelve traits, a series of statements (four to nine) characteristic of behavior in student affiliations has been listed. These describe both positive and negative aspects of such behavior. The statements are so designed as to

enable you to report directly your observations of the student's behavior in terms of the frequency with which such behavior has been demonstrated. The manner in which the individual student has performed is reported in Part I as it applies to that student only.

Part II is made up of six components which cut across and include the specific traits listed in Part I. The notable difference is in the method of evaluating the student on the two sections. Consideration of the quality of a student's performance in comparison with other affiliated students (his relative standing in the group at your center) enters only in Part II of the report form after you have established a pattern of his actual performance in Part I.

Part III is an additional feature of the new official form. The experimental form had but two purposes, the evaluation of the major aspects of occupational therapy student performance and the securing of a score or grade to indicate an individual's degree of performance. To render the report form more useful to the school directors, two more objectives have been incorporated in Part III: some of the elements basic to counseling or guidance (a major purpose of any report on student performance) and the use of the form as a basis for recommending the student for initial placement as a practicing occupational therapist.

Scoring procedures have been revised throughout. Five categories of frequency are now listed for each of the eighty statements in Part I. Values have been assigned to each of these categories in accordance with a scoring key agreed upon by the special committee. A sixth category, "Not applicable," is again furnished when an evaluation cannot be made because of a unique situation within the specific occupational therapy department.

Another innovation is the "one-way" scoring of 11 of the 80 statements in Part I. The student will not receive credit for the positive but will be penalized for the negative (or vice versa depending on how the statement is phrased). For example, we would expect most students to "be courteous," giving them no credit for being so but deducting credit if they fail to be so. Similarly, we do not anticipate having many students who "create friction." If they do, they will be penalized in the scoring; if they do not, they will not be given any credit.

The original five categories are listed in Part II to indicate the relative degree of demonstrated effectiveness but the values assigned have been revised so that the total score for Part II equals one-half the maximum possible score for Part I.

The final score will be a summation of Parts I and II of the report. Data in Part III are not included in the scoring.

(Continued on page 49)

PEOPLE YOU SHOULD KNOW



DOROTHY LEHMAN
Director of Recruitment

We are very happy to extend an official welcome to the latest addition to the staff in the national office—Miss Dorothy Lehman, who comes to us from Harrisburg, Pennsylvania, as director of recruitment and publicity.

Last July the National Foundation for Infantile Paralysis awarded \$19,500 to the American Occupational Therapy Association to further implement our efforts in recruiting more men and women into the field of occupational therapy. The expansion of this service has made it possible to plan and coordinate a more comprehensive national program which will include guiding local and state committees in operating their programs, assisting occupational therapy schools in executing their own recruitment and publicity efforts, as well as over-all coordination of the total program.

To this task Miss Lehman brings wide experience. She is a graduate of Villa Maria College in Erie, Pennsylvania, and has a background of teaching, music, radio and newspaper work.

After graduating from Villa Maria, Miss Lehman served as registrar for a year and then became assistant to the director of visual education in the state museum at Harrisburg. During the five years she served in this capacity she had extensive experience working with students, teachers and lay people, lecturing on the use of the state visual library.

In 1942 Miss Lehman became executive director of the Clearfield Community Chest in Clearfield, Pennsylvania, where her concise thinking, coupled with well directed enthusiasm, enabled her to organize the many facets of a community chest campaign from student participation to the establishment of a veteran's referral center. It was during her 10 years of service in various parts of the state that she inaugurated a complete schedule of coordinated professional and volunteer services. Miss Lehman was then invited to become the director of the special fund campaign for the North Carolina Symphony Society where with her excellent musical background and rich experience in public relations she evolved a long range program for the use of the society with a view to more effective financing.

Miss Lehman has come to us with a keen enthusiasm for the work we are doing and an insight into the challenge that lies ahead. It is to help meet the problem of recruitment that she is planning a bi-monthly bulletin for an exchange of ideas and to solicit suggestions and a report of activities from our members. It will be through this organ, one of a number of channels, that Miss Lehman will keep in touch with all that is going on in the field. A kit is being prepared which will be easy to use and will contain illustrative forms in the various media of publicity. This will be geared for state chairmen and will be planned for use on the local level. Colleges and schools outside the professional area will receive promotional material which is now being planned. In this way Miss Lehman hopes to strengthen another possible source for recruitment.

Miss Lehman invites consultation at any time. She plans to visit state associations in the early spring to help with arrangements for local programs and any immediate problems.

This new expanded activity in our association program will work in close conjunction with the well functioning recruitment and publicity committee under the chairmanship of Mr. John Redjinski. The additional opportunities which Miss Lehman's leadership gives us should mean one of our most successful years.

We again express appreciation to the National Foundation for Infantile Paralysis for their vision, insight and generous help in making possible this program which so effectively strengthens our needs.



FEATURED O. T. DEPARTMENTS

PRE-VOCATIONAL TRAINING AND GUIDANCE FOR CEREBRAL PALSIED CHILDREN

El Monte Cerebral Palsy School
Arcadia, California

Violet Maas McCarty, O.T.R.

The occupational therapy program in a school for cerebral palsied children usually consists of a total self-help treatment program including feeding and dressing, coordination, relaxation, functional hand use, and gross and fine skills of activities needed to perform tasks of daily living.

In addition, several other activities may be carried on as group and committee projects. At the El Monte Cerebral Palsy School these group projects include a girls' grooming and hobby group; a boys' woodworking, grooming and hobby group; a vocational rehabilitation committee; and a mothers' discussion group.

The Girls' Grooming and Hobby Group. This group of eight teen-age girls meets for one hour a week in the occupational therapy department. A varied list of activities is offered:

1. In each period, the therapist reads and the girls discuss one phase of *personal grooming*: bath, perspiration odors, make-up, care of hair, nails, and teeth, clothes design and colors, neatness of clothes and shoes. *Poise*: standing and sitting posture, relaxed hands for total body gracefulness. *Health*: correct eating habits, diet, exercise and entertainment, sleep.

2. *Learning to care for personal appearance.* In a therapeutic manner, each activity of grooming is analyzed and simplified for each individual girl. For example: care of finger and toe nails, combing and putting up the hair, shining shoes, learning to apply the proper amount of make-up and care of the skin. Correct finger and hand movements are demonstrated and then the girls proceed with each activity. Also the girls learn to shampoo their own hair, use a clothes brush, do simple mending of their garments and learn to iron clothes.

3. *Hobbies and interests.* A discussion is led of the activities that the girls have done in the past, what they are doing at the present time at home for recreation, activities which the girls are interested in doing at our weekly "get-togethers" now and in the future, and consideration of activities that they can do at home as hobbies.

4. *Learning a craft* which may become a hobby to them. The therapist mentions a few crafts that can be suitable to the girls. Whenever possible, utilization of desired finger, wrist and arm movements are stressed in the craft which each girl chooses. However no mention of this therapeutic activity is made. It is desirable that these crafts represent *recreation* to them rather than *work*. After the therapist has started the girls on a craft, working at home is encouraged so as to start or maintain home *recreation*.

5. Since most of the girls need better finger dexterity, *finger exercises* are performed in the group for ten minutes at the beginning of each period. The girls happily respond and say it is "more fun" to do their finger and wrist extension and thumb abduction exercises together.

6. Occasionally *pre-vocational* ideas are discussed. "The kind of work I'd like to do—" The girls participate in a simple job analysis and indirectly check themselves to



Hand coordination and dexterity is more easily accomplished by use of this highly motivating telephone switchboard.

see if they are capable of performing a certain activity or occupation.

7. The program of activities for each period is very flexible. Crafts and grooming may alternate periods depending upon the time and the interests of the girls, however hand and arm exercises are given each time.

The Boys' Woodworking, Grooming and Hobby Group. The boys, too, have a group for learning to care for their personal appearance, crafts and the development of hobbies. The activities which are listed in the girls' group, however, are adapted to the masculine interests of the boys. For example, we have a woodworking group. While constructing simple projects, the boys become acquainted with the tools, learn how to take care of them and how to use them properly. They benefit from the therapeutic motions of the various woodworking activities as well as learn and enjoy a worthwhile hobby and interest.

Recently the boys have become enthusiastic about constructing a shoe shine box for themselves. This has been a motivating factor in keeping their shoes neatly shined.

Telephone Switchboard. The therapist contacted the manager of the local telephone company and asked for an obsolete instrument such as a P.B.X. The need stated was for development of eye-hand coordination, manipulation for finger dexterity, arm exercises, as an aid to speech therapy and as a pre-vocational activity. The switchboard, with four phone connections, has been very useful and greatly appreciated. The therapeutic values have been:

1. Finger and thumb opposition: turning the control knobs and the knobs for ringing the stations.

2. Isolated finger extension: flicking the knobs or buttons, and dialing their own telephone number. Also they pleasantly learn their own phone number, how to get operator, police and fire departments. This is important to know in case these children are alone in an emergency.

Using the dial to learn the numbers from one to ten and the alphabet has aided the children in their classroom work.

3. Wrist flexion, extension, radial and ulnar deviation; reaching for and plugging in the pegs. The actual plugging in and pulling out of these pegs provided a great amount of resistance.

4. Thumb abduction and training for grasp with forearm in midposition. This is accomplished by grasping the plug-in peg with fingers on one side of the peg and the thumb on the other side.

5. Elbow extension, shoulder flexion, and slight forearm supination: reaching for and plugging in the pegs.

6. This activity is suitable for both a hemiplegia and a quadriplegia. The switchboard is equipped with a crank to ring a station with one hand and a button to hold forward at the same time with the other hand.

An Occupational Therapy Mothers' Discussion Group. A need was felt for the utmost cooperation from the parents of the cerebral palsied children. To meet this, we organized a group of twelve mothers. The following represents the method of organization which was used in the occupational therapy department.

1. The mothers were selected with the following criteria: (1) the group must be kept small; (2) previously, some mothers showed either a great amount, or a very little interest and understanding in their children's problems; (3) the children of these mothers all needed self-help activities, especially feeding and dressing training.

2. The topics for discussion included: feeding, dressing, toilet training, and other self-help activities; coordination; relaxation; and special problems that would be within the scope of occupational therapy.

3. Procedure: The mothers were given an opportunity at the first meeting to write out the questions they would like to have discussed. An attempt was made to establish a relaxed and friendly atmosphere and to encourage complete participation by them. Time was allowed at the last meeting of the series for an evaluation by the group.

A Vocational Habilitation Committee. At the time when the services of the school are no longer available (age limit: 21 years), the individual should be prepared to meet the demands of society as well as possible. In order to have a program of training and treatment of cerebral palsied children for post-school plans, a pre-vocational habilitation committee was organized. The following procedure was initiated:

1. Evaluation of the physical, mental and educational capacities of the individual regarding his ability to perform the activities of daily living essential to work. Analysis of limitations and abilities of each individual such as the degree of ability to feed, dress and take care of bathroom needs, speak and ambulate.

2. Evaluation of the physical, mental and educational demands of several possible jobs. Determination of the qualifications necessary for the job and the working conditions.

3. Several job suggestions can be made for each child, and if possible, training can be offered in these pre-vocational activities.

4. Various types of actual work activities may be introduced in the classroom or in therapy.

5. A conference with the parents may aid in mutual understanding of the objectives.

We have used the following outline in pre-vocational guidance for cerebral palsied children:

1. Medical, including neurological, examination, brief-

ly stated. Include the degree and extent of damage both physically and mentally.

2. Psychological evaluation. Include testing results and interpretation.

3. Nurse's evaluation.

4. Teacher's report and analysis.

5. Speech analysis.

6. Physical therapy evaluation: muscle and physical activity analysis.

7. Occupational therapy evaluation: analysis of self-help, hand skills and coordination.

8. Additional facts (child's own response): hobbies, main interests, special aptitudes or skills, "favorite" subjects in school.

9. General considerations (by all the staff working with the child):

a. Adaptability

b. Emotional stability (poise)

c. Sense of humor

d. Judgment

e. Dependability (ability to accept responsibility)

f. Cooperation

g. Ability to understand and carry out directions

h. Ability to profit by instruction and criticism

i. General health (other handicaps or conditions such as vision, hearing, seizures, etc.)

j. Personal appearance (sitting, standing, facial, drooling, grimaces)

k. Initiative

l. Home environment and relationship, how accepted. Parents attitude toward prospects of child working

m. Socio-economic position of the family

n. Physical capacity and endurance

o. Ability to get along with others

p. Any other information helpful in giving a total picture of the child

SUMMARY

1. In addition to individual therapy periods, the girls' and boys' grooming and hobby groups have proved successful. They have shown more willingness to participate, for example, in finger exercises, combing hair, and shining shoes when they are all doing them together. It has aided in reducing self-consciousness.

2. The great motivating force of the telephone switchboard has renewed the children's interest in therapeutic activities. It has aided the children in speech, therapy and classroom activities. It has been of value to children as young as three years and as old as twenty-one years.

3. The mothers have shown enthusiasm and interest in the discussion groups. We feel the cooperation in carrying out a home treatment program has improved as a result of the mothers' discussion groups.

4. A long-felt need for pre-vocational guidance was realized in part with the organization of the habilitation committee. The aim of all treatment programs and educational and vocational training is: (1) to help the cerebral palsied person achieve the greatest degree of independence of which he is capable, and (2) to make a satisfactory adjustment to his handicap and to his environment.

Abstracts of ANNUAL REPORTS AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

Hotel Shoreham, Washington, D.C.
October, 1954

MEETINGS OF THE BOARD OF MANAGEMENT

The meeting of the Board of Management was called to order at 9:15 a.m. on October 18 by the president, Miss Henrietta McNary.

Roll Call

Members Present:
Miss Henrietta McNary
Major Ruth A. Robinson
Miss Clare S. Spackman
Miss Florence Stattel
Miss Marie Louise
Franciscus
Mrs. Elizabeth Jameson
Miss Beatrice Wade
Miss Wilma West
Miss Carlotta Welles
Miss Caroline Thompson
Capt. Gertrude Murray
Dr. Sidney Licht
Miss Marguerite Abbott
Miss Virginia Caskey

Miss Marguerite McDonald
Miss Marion Crampton
Miss Ruth Dalton
Not Represented:
Miss Marion Davis
Dr. Donald Rose
Dr. Arthur Jones
Dr. Henry Kessler
Present at October 21
meeting:
Dr. William R. Dunton, Jr.
Miss Margaret Gleave
Mr. Laurel Nelson
Mrs. Patricia Bodine
Mrs. Alice Cooley
Miss Corinne White

Minutes of the previous meeting. The minutes of the mid-year Board meeting held at the Hotel Marrott, Indianapolis, March 28, 1954, were approved as distributed with minor corrections.

Report of the treasurer. Financial statements and budgets for general and educational funds were distributed to all Board members in advance of the meeting. Statement of general, educational and endowment reserve funds was distributed at the meeting.

The treasurer presented the following items which were acted upon by the Board.

1. The fiscal year to be changed to July 1-June 30 effective June 30, 1955. The adjusted budget to be presented to the Board at the 1955 midyear meeting.
2. The annual conference is to be set up as a separate account.
3. The treasurer and executive director were empowered to place excess funds in savings accounts in any reliable savings bank (not Federal) or to invest in government bonds—amount at their discretion.
4. Two thousand dollars of reserve funds to be earmarked as a depreciation or replacement fund for equipment and furniture and 5% in actual cash of the value of the furniture and equipment to be added annually to the reserve fund.

Report accepted with thanks.

Report of executive director. This report was distributed to all Board members in advance. Action on several recommendations is recorded under items of business elsewhere in these minutes.

Information was presented on membership, national office personnel, Yearbook, recruitment, publications and literature, contacts with foundations and grants, Medical Advisory Council, significant meetings attended and public relations activities.

The request to the Commissioner of Internal Revenue for reclassification of our tax exempt status was reported as granted.

Board action was taken on the following:

1. It was voted that we subscribe to organization membership in the World Federation for Mental Health and

the Mental Hospital Service of the American Psychiatric Association. Further information of the American Public Health and American Public Welfare Associations is to be prepared and circulated to the Board prior to the midyear meeting.

2. It was recommended that the listing of meetings attended as recorded in the annual report indicate those at which AOTA was represented by local groups. It was further recommended that the House of Delegates urge delegates to inform AOTA of forthcoming meetings in their areas.

3. It was requested that the recommendation of a planned program for the association be given thought and preparation and that it be presented at the midyear meeting for further consideration.

Report accepted.

Report of the educational secretary. Miss Heermans presented a summary of her report, copies of which were distributed to all Board members in advance.

Projects and activities in which the education office has engaged include: final comparative analysis of clinical training report (official form) and the report of performance in clinical affiliations (experimental form); proposed revision of report of performance in student affiliations; evaluation of student affiliation programs in cooperation with the committee.

Scholarship awards included four of \$150.00 each from the Picture Craft Company and twenty-seven of varying amounts from United Cerebral Palsy. Further awards from this \$15,000 fund will be made for the spring semester. The need of a scholarship committee is recorded in these minutes under *other business: item No. 2.*

The education office has worked closely with the Office of Vocational Rehabilitation in furnishing information to the occupational therapy schools re opportunities afforded through new legislation—Vocational Rehabilitation Act Amendment of 1954 (Public Law No. 565).

New Schools:

- a) School of Physical and Occupational Therapy, Puerto Rico, approved by American Medical Association, June, 1954.
- b) University of Buffalo and University of No. Dakota are enrolling students for 1954-55 academic year.

Report accepted.

Report of the speaker of the House of Delegates. A summary report was distributed to all Board members in advance. The recommendations from the House (as reported by the speaker, Miss Marguerite Abbott, and the vice-speaker, Mrs. Patricia Bodine), and resulting action by the Board are as follows:

1. Recommended implementation of the formation of districts on a voluntary basis within the present structure of the state associations.

The Board voted to defer action on districts until the midyear meeting. Details of the district plan to be circulated in advance.

2. Recommended that the incomplete report of the chapter committee be circulated to the Board for review and study prior to the midyear meeting at which a further report will be submitted.

3. Recommended that action related to specialty groups such as "manual arts" and "music therapy" be tabled and problems of non-registered personnel only be discussed.

The Board concurred.

4. Recommended that (a) some form of recognition be given to non-professional personnel, (b) a joint committee be appointed from the House of Delegates and the education committee for implementation, (c) recommendations for such implementation to be submitted to the Board for final approval.

The Board so voted and enumerated suggestions for in-

clusion by the joint committee.

5. Recommended that a committee from the House be appointed to study the question of continuing use of title by the Western New York OT Association and to report back to the next meeting of the House.

The Board concurred and requested a future statement of information.

Report accepted with thanks.

Report of the Editor of AJOT. A summary report was distributed to all Board members in advance.

A new organization, the Association of Medical Advertising Agencies, met in conjunction with the AMA annual meeting in San Francisco. Miss Carlotta Welles represented us at her own expense. No action to report.

The Quarterly Cumulative Index Medicus and Psychological Abstracts will start to run abstracts from AJOT.

Requests were made from state OT associations for lower advertising rates in AJOT for money-making propositions. It was voted that $\frac{1}{2}$ rate be given for this purpose.

It was voted that an 8th issue of AJOT be printed as Part II of an existing issue and that this be a conference issue to be published within the year and in larger edition than the regular run. The financial situation of AJOT is such that this experiment appears reasonable.

Report accepted with thanks, gratitude and pride.

REPORTS OF CHAIRMEN OF STANDING COMMITTEES:

Education committee. Miss Franciscus presented a combined report of the education committee and subcommittees on schools and curriculum, student affiliations and graduate study. The following actions were reported:

1. The new report form on performance in student affiliations was accepted in content and format with minor corrections to become effective January 1, 1955.

2. The rater's guide for RPSA was accepted with minor corrections.

3. Recommendation that RPSA scoring be done this year by each school with a key from the education office.

4. The application for approval of schools was approved as revised with minor corrections.

5. The SOP for school directors was approved for final editing with duplication and distribution from the education office.

Recommendations:

1. That a listing of special services be sent to schools prior to each examination so schools can order what they wish.

2. That the instructional materials compiled by affiliation centers be made available on loan from the education office and that a minimal charge be made for handling.

3. That a statement be formulated on purposes, values and characteristics of graduate study and that it be published in the *Newsletter* following approval by the Board.

4. That this committee go on record as welcoming a long-term curriculum study (possible grant from NFIP) involving intensive and extensive exploration of the educational aspects and clinical procedures of OT.

5. That the National Institute of Mental Health be approached for a short-term institute grant. The preliminary planning committee to be comprised of members of the education and clinical procedures subcommittee on psychiatry.

6. That a standing committee on scholarships be appointed.

A formulated statement on purposes, values and characteristics of graduate study (see No. 3 above) was presented for approval. The Board accepted the statement with corrections.

Report accepted with appreciation.

Registration committee. Copies of this report were distributed to all Board members in advance. The committee met eight times during the year to prepare the examinations for the two 1954 administrations for which a total of 527 examinees wrote. This represents 58 more than the previous record of 469 in 1952.

The registration committee has five new members representing five disability areas.

Report accepted.

Permanent conference committee. A summary report was distributed to all Board members in advance. Mrs. Kahmann reported a total of 34 commercial exhibitors at the 1954 conference.

The Board approved the recommendation that the membership of the permanent conference committee be reorganized to include the local chairman and co-chairman of each current conference and of the succeeding year's conference and that this replace the original plan of subcommittee chairmen.

The Board requested that the proposed revisions in the SOP be prepared and circularized to the Board prior to the midyear meeting when they will be considered for approval.

The Board recommended that a special committee study fees revision of conference and institute.

The Board voted that a special fund be set up for use of local chairmen.

Report accepted.

Clinical procedures. A summary report was distributed to all Board members in advance. Miss West confirmed the three major anticipated goals, on the first one of which the six subcommittees are at work: (1) to define the treatment objectives and functions in OT in each of the diagnostic areas for the purpose of raising standards of treatment, (2) to define the functions of the occupational therapist—functions additional to those covered in treatment, (3) production of source materials of use to the practicing therapist.

Report accepted.

Legislative and civil service. A summary report was distributed to all Board members in advance to which Mr. Nelson supplied up-to-date information.

There was an 80% return on inquiry forms sent to merit system supervisors and civil service officers in 48 states and Puerto Rico giving data on class specifications. For further implementation of this valuable material the Board suggested (1) a list of the classes to be compiled and published in AJOT with code designation to avoid identification of states, (2) announcement to be inserted in the *Newsletter* of availability of this information, (3) every contributing state and non-contributing groups should receive a copy and summary with identification of their code, (4) announcement of published material should go to state chairmen, (5) legislative and civil service committee be urged to keep this valuable information up to date.

Report accepted with pronounced appreciation.

Special studies. A summary report was distributed to all Board members in advance in which Miss Gleave indicated total lack of response from the field resulting in lack of action by the committee and the consequent feasibility of her resignation.

The Board was unwilling to accept this action and requested the chairman to reconsider and continue with greater support assured through the following lines of action:

1. The schools, in their clinical visits, should note special studies they observe going on, and refer these to the appropriate committee.

2. Education committee should contact the schools to-

ward assuming more responsibility for observing, reporting and encouraging special studies and research.

3. Schools and curriculum subcommittee should stimulate each school to compile and produce a list of interesting studies.

4. Student affiliation subcommittee should be charged with taking on responsibility for further contributions.

5. Graduate study subcommittee should be charged with screening and evaluating studies.

6. House of Delegates should encourage more active interest and participation of state associations in creating local committees for research and special studies.

7. National office should establish a compilation of projects.

The Board voted that this committee remain status quo until the midyear. The national research laboratory committee will remain under special studies for the time being.

The chairman withdrew her resignation.

Recruitment and publicity. Miss Fish read the report in the absence of the chairman, Mr. John Redjinski. Publication of a manual for recruitment chairmen was one of the final projects completed under the NFIP grant. The committee look forward to the leadership of a full-time director of recruitment and publicity to be appointed under the 2nd NFIP grant.

A midyear survey showed the continuing excellent work of the state committees indicating that over half are using press releases, career days, library contacts, vocational guidance, window displays, TV and personal contacts.

Report accepted.

Reports of chairmen of special committees:

Revision of OT volunteer training course. A special committee of the Board gave study to the revisions proposed by the volunteer committee as recommended at the midyear meeting and suggested a few minor changes.

The Board voted that the report be referred back to the original committee with Board approval and no further return to the Board necessary.

Report accepted.

Manual on OT. A summary report was distributed to all Board members in advance. The report was presented in the absence of the chairman, Miss Katherine Peabody. All section editors have been assigned and are writing. There was discussion relative to possible overlapping and duplication with the work of the clinical procedures committee.

The Board voted that the chairman continue with the writing of the manual and be urged to complete the assignment as rapidly as possible as there is great need for this material.

Report accepted.

Committee on awards of merit. A summary report was distributed to all Board members in advance. Capt. Murray presented the committee's concept for establishing policies and framework.

It was voted that a special committee on awards be appointed by and from the Board to continue to work out the mechanics of the proposal and to report back to the Board.

Report accepted with thanks.

History of OT. A summary report was distributed to all Board members in advance. The report was presented in the absence of the chairman, Miss Mary Merritt. Encouraging response to the questionnaire was reported.

The committee recommended: (1) that the history be in book form (Vol. I of a series) written for general as well as professional interest, (2) that the author be paid outright for the writing and that royalties be paid to the AOTA, (3) that an OTR writer would be preferable to a professional writer.

The Board voted that OTR's and professional writers

should be investigated as to availability, fees, financial arrangements and royalties. The national office will deal with this aspect and refer findings to the executive committee.

The Board urged the committee to secure material as soon as possible, from the persons concerned with the early development of the Association.

Report accepted.

Other business:

Report on medical advisory council. Miss McNary reviewed the first meeting of the council which was held in conjunction with the 1954 conference and was attended by all seven of the members appointed as representatives from their respective specialty college or academy. The meeting was considered highly profitable and the members expressed feeling for their responsibility in conveying back to their own groups, accurate interpretation and information gained in the discussion of agenda items: objectives and purposes of the council; OT in relation to the five clinical areas; recognition of non-registered personnel; current needs in OT.

Related business. A recommendation from the sectional meeting on tuberculosis (1954 conference) was received by the Board requesting that a study be made of the impact of changes in modern treatment. It was voted to refer this request for comment and answer to the member of the medical advisory council representing the field of tuberculosis.

Establishment of a scholarship committee. This was one of the recommendations of both the educational secretary and education committee. The need has become obvious with the increasing number of scholarships available and the pressure of immediate implementation of the United Cerebral Palsy grant.

The Board voted that a scholarship committee, including members of the education committee, be appointed for policy making and mechanics of operation and that their duties shall include formulation of the mechanics of awarding. The Board suggested that more information should be provided by the school directors relative to the rating of candidates and indication of their academic, economic and professional qualifications.

Proposal to National Institute of Mental Health. A background statement for a possible project grant was distributed to all Board members. The executive and education committees had recommended that we proceed following encouragement received from the NIMH relative to submitting a proposal for the financing of an intensive training conference.

The Board endorsed the recommendation that we prepare a proposal and that the preliminary planning committee be comprised of members from the education committee and the psychiatric subcommittee of the clinical procedures committee.

Report of AOTA by-law reorganization. A background statement was distributed to all Board members. Following Board action at the 1954 midyear meeting, the executive director and executive committee investigated our constitutional position relative to proxies, postal voting and by-law reorganization. Information informally secured from legal counsel indicated that we are quite out of order.

The executive committee recommended that we engage legal advice, not to exceed \$400.00 total expenses, and bring our constitution and by-laws into line. They suggested that (1) we seek information from the original lawyer and officers connected with the beginnings of the Association; (2) the certificate of incorporation and constitution and by-laws be photostated and located in several places for safekeeping.

The Board voted that the recommendation of the ex-

ecutive committee be accepted and that we proceed accordingly.

American Hospital Association proposal re central headquarters. Copies of correspondence with AHA were distributed to Board members relative to the new headquarters building in Chicago and the invitation to related agencies to consider joint housing.

The Board voted that we inform AHA of our serious interest indicating that a final decision would be dependent upon (1) cost to us, (2) approval by the membership, (3) guarantee of permanency of tenure. It was further suggested that we ask for more detailed information on their long-range plans; give our present total rental to indicate our scale; reiterate our space demands.

1955 midyear meeting. An invitation to meet in Atlanta was received from the Georgia Association. The Board voted to locate there if the majority of school directors indicated suitability, otherwise Chicago was the choice. Weekends of March 18, or 25, or the next best were suggested.

There being no further business, the meeting adjourned at 5:30 P.M.

Respectfully submitted,
Marjorie Fish, O.T.R.
Executive Director

EXECUTIVE DIRECTOR'S REPORT

Our activities and accomplishments are herewith recorded. A complete report of the program for the first six months of the fiscal year was submitted to the Board at the midyear meeting (AJOT, May-June, 1954). This report will be concerned with continuing business and activities of the national office and association-at-large for the past six months, and a view to our direction for the coming year.

Membership. As of September, 1954, there were 3,642 paid members which represents an increase of approximately 155 over 1953. Active members 2,699; sustaining 306; associate subscriber 64; associate 85; student 475; honorary and life 16. Registered therapists totaled 4,095 which represents an increase of 233 over the previous year.

Inside the national office. Much time has been given to the orientation of the entirely new secretarial and clerical staff in the general and education offices reported at the midyear meeting. They have adjusted well and are fulfilling their responsibilities excellently. During the long period in which the position of assistant director remained unfilled, we secured the temporary services of Mr. S. Izutsu, O.T.R., for two months. Mrs. Frances Shuff was appointed to this position on August 1st and brings to it a background of experience and enthusiasm. Mary Frances Heermans assumed the position of educational secretary on May 10 and overlapped a month prior to the departure of Martha Matthews.

We are in process of selecting a new staff member, namely, the director of recruitment and publicity, provided for in the second grant from the National Foundation of Infantile Paralysis. Applications were invited during the summer from professional public relations personnel through agencies, and from OTR's through the *Newsletter*. Eight applications have been received to date, screening is proceeding and the executive committee will serve as the personnel committee.

We have not implemented the new office procedure on membership billing, bookkeeping and records this year because of the absence of the executive director in Europe at the time of implementation and the newness of Mrs. Shuff to supervise. We will set it up during the coming year.

Additional office space has been sublet on the 14th floor

of our building which will house the director of recruitment and publicity and a secretary. Much needed storage space is also included.

The current edition of the Yearbook was promptly off the press the second week of April. It is gratifying to note that the advertising receipts are the largest we have ever had (\$2,340 as against \$1,816 of last year) due to more full page ads and the AJOT "package deal."

We feel membership services compose one of our most important functions in developing strong reciprocal action between the national office, membership-at-large, state associations and committees. Mention will be made of a few of these.

1. Placement. Two listings of positions available were prepared, a full quarterly listing in January and a supplement in April, the latter running almost as large as the former. A third is currently under preparation and will appear as the regular fall listing. We have added a new section this year, namely, a listing of school openings and unusual positions involving research and special projects. The number of institutions requesting therapists still far exceeds the number of OTR's available.

2. Book loan. A revised listing has been prepared (available at 1954 conference) containing 125 items of which 24 are new since August. One hundred and one requests from members have been filled. The listing is screened each six months for deletions and additions.

3. Service to committees. At the president's request, a complete listing of all AOTA standing and special committee members was compiled for publication in AJOT. This represents approximately 215 persons. The work of the association is accomplished in large part by committees and a number of our publications are produced by committees. We do not utilize many channels of acknowledging the individuals who contribute. There should be fuller listing of committee membership in publications.

We wish to acknowledge the generous financial contributions for scholarships, educational or general purposes received from seven of the state associations, totaling \$485.00. Two of the state groups also contributed to the World Federation of Occupational Therapists. Acknowledgment is also extended to those associations and their members who represented the AOTA with exhibits and attendance and participation at conferences, among these: Conference for Care of Long-Term Patient; President's Committee on Physically Handicapped; American Hospital Association; Warm Springs Foundation dedication of treatment unit.

Recruitment. The two final projects in the NFIP program have been completed: (a) New traveling exhibit. (b) A manual for recruitment chairmen. The exhibit, a large four-panel presentation, has had its initial appearances at the annual meeting of the American Hospital Association and the AOTA 1954 conference. The manual for recruitment chairmen, an excellent guide, was written by John Redjinski, recruitment committee chairman, and is compiled in loose leaf style for additional supplements of pertinent material. Copy of the manual was sent to each state chairman.

Forms were provided for recruitment reports from the state chairmen. Less than one half of these were returned but indicated good effort. Mailings to chairmen included: (1) announcement of UCP scholarship grant, (2) announcement of NFIP grant II, (3) booklet "Four Futures," in quantities of 500-1000, (4) manual.

Publications and literature. The volume of our printed materials and general correspondence going out of the national office has increased to such extent this past year that it has necessitated extra clerical help. The scale now indicates an additional person other than the membership secretary who has previously combined these duties. We are averaging about 9,000 pieces of mail per month. Dis-

tribution of the new literature developed under the NFIP recruitment grant alone represented over 200,000 pieces mailed individually or in bulk.

Following midyear Board recommendation, 8,000 reprints of the newly revised administrative practices and personnel policies were procured from AJOT. These were sent as a newsletter insert to every member. Copies have been distributed to personnel officers in civil service commissions of all states through the legislative and civil service committee. A mailing to administrative officers in AHA hospitals will be undertaken early this winter.

Foundations and grants. A total of \$34,500 has been received this year in grants. This represents the largest amount to the association in a given year and is distributed as follows:

1. A grant of \$19,500 from the National Foundation for Infantile Paralysis became effective July 1 to establish a full-time recruitment and publicity director in the national office. The detail of this proposal was submitted at the midyear Board meeting and announcement at the time of the award was sent to members of the Board, delegates and recruitment chairmen. Implementation of the grant is described in an earlier part of this report.

We are indebted to the NFIP for this second grant enabling us to continue, far more effectively, the recruitment program upon which we have worked for a number of years and which had reached the stage of development demanding full-time attention.

2. United Cerebral Palsy offered a grant of \$15,000 which became effective July 1 to establish undergraduate scholarships for the 1954-55 school year. The detail of the proposal was submitted at the midyear Board meeting and announcement of the time of the award appeared in the *Newsletter*. The implementation of this grant is being conducted in the education office and is reported by the educational secretary. We express deep appreciation to the UCP for their support toward one of the major gaps in our manpower.

3. The National Institute of Mental Health requested an informal discussion meeting to arrange possible grants. The executive director and Miss Elizabeth Messick met in July with representatives of the training and standards branch and professional services branch of the NIMH. These men indicated that funds for a long term research project would probably not be available now but that their training committee would undoubtedly receive, with favor, a proposal from us for the financing of an intensive training conference (1 week) similar to those conducted in psychology, psychiatric social work, and psychiatry. The education committee has been asked to make recommendations on a plan.

Medical advisory council. The appointment of three more members since the midyear report completes the membership: American College of Physicians, Dr. Alex Burgess, Providence; American College of Surgeons, Dr. Robert Myers, Chicago; American Psychiatric Association, Dr. Benjamin Simon, Boston. Complimentary membership has been extended and considerable informative literature supplied.

The first council meeting will be held in conjunction with the 1954 conference and will take the form of an all day session, Tuesday, Oct. 19, concluding with the annual business meeting at night, thus enabling the new council members to see us in action. A pertinent agenda has been planned and we anticipate a valuable beginning in this step toward strengthening our medical liaison.

Significant meetings. The following are deserving of mention:

1. The executive director represented AOTA at the second meeting of the National Rehabilitation Association held in Atlantic City in May. Thirty-five agencies were

present at the two-day session revolving around current legislation for the handicapped and its implications to professional groups.

2. The first jointly sponsored American Hospital Association Institute for OT eventuated in May, from two years of planning. The 90 OTR's from 25 states, Alaska, Canada and Hawaii were enthusiastic. Dr. Letourneau, Council on Professional Practice, who handles all AHA institutes indicated their satisfaction and requested that plans be made for 1955.

3. The executive director was invited to confer in Washington with staff members of the Office of Vocational Rehabilitation, Dept. of Health, Education and Welfare, and to present the OT needs for scholarships, recruitment and school aid. The purpose was orientation prior to and in preparation for immediate planning pending congressional passage of the President's rehabilitation legislation. A second implementation is relative to short-term courses in rehabilitation procedures which is currently being formulated and in which we are participating.

4. Miss Spackman, delegate, will present a full report at the Washington conference of the first congress of the World Federation of OT's. The executive director wishes to take this opportunity to express appreciation for the opportunity of serving as one of the alternate delegates. An early report on the congress appears in the October issue of AJOT. The next meeting of the council (1956) was voted to be held in Philadelphia. The second world congress (1958) was voted to be held in Denmark. The executive director was appointed as official representative of the WFOT to the congress of the International Society for the Welfare of Cripples.

5. It was a pleasure to represent WFOT and AOTA among the 700 persons present from 27 countries at the International Society for the Welfare of Cripples, The Hague, (Sept. 13-19). The executive director was called upon to give a brief address at the session on organizing international services presided over by Mr. Kurt Jansson, United Nations Rehabilitation Unit.

The experience of two world meetings within weeks of each other was a rare privilege. These experiences re-impress upon us the importance of taking our place in the professional world line-up and of devoting serious attention to the increasing demands and implications of foreign requests.

Public relations. The meetings listed below represent activities of the national office staff not mentioned elsewhere in this report.

American Congress of Physical Medicine and Rehabilitation—Washington, D. C.

Association for Aid to Crippled Children—annual meeting, N.Y.C.

Brooklyn Visiting Nurse Association (OT Advisory Committee), N.Y.C.

International Society for Welfare of Cripples (Film Screening Board), N.Y.C.

National Health Council (Health Education Committee), N.Y.C.

National Rehabilitation Association (Region II—annual meeting, West Point.

N. Y. Dept. of Health and Welfare (Handicapped Children's Div.), N.Y.C.

N.Y.O.T. Association (regional meeting)—guest speaker, N.Y.C.

We have received doctors, hospital administrators, social workers, physical and occupational therapists from Australia, Austria, Belgium, Brazil, France, India, Japan, Netherlands, Puerto Rico, Scotland, So. Africa, Sweden.

Agency or institutional membership appears to be an increasingly important matter today as the trend of inter-professional activities and joint planning grows. The AOTA became an organization member of two health

agencies last year: International Society for the Welfare of Cripples; National Health Council. We have already begun to feel the mutual benefits. Invitations to membership have been received from four other organizations: American Public Health Association; American Public Welfare Association; American Psychiatric Association (Mental Hospital Service); World Federation for Mental Health. Our financial status does not warrant unlimited memberships of this type, but the Board is asked to indicate general policy.

Recommendations for 1955. The following recommendations are put forward as objectives which will help give us the balance of a dynamic and on-going program.

1. Production of a film.

2. Grants and Research. Grants received in the past two years have totaled \$50,000 and have been devoted primarily to promotional purposes for which there was extreme need and for which we must provide continuation. There is need for resumption of longer term projects in our educational research program to fully develop the excellent work already accomplished. There is further need to begin research in clinical studies which we have not undertaken to date.

Deep appreciation is expressed for the understanding and help of the officers, executive committee, Board of Management; committee chairmen, members, and each of the professional and secretarial staff of the national office. It has been a privilege to complete another year with you.

Respectfully submitted,
Marjorie Fish, O.T.R.
Executive Director

MEETINGS OF THE HOUSE OF DELEGATES

The credentials of two new OT state associations have been approved by the credentials committee of the House of Delegates—the *Utah* and *Rochester Occupational Therapy Associations*, making a total of 36 occupational therapy state associations, with a membership of about 1500.

The plan for the *Eleanor Clarke Slagle Occupational Therapy Guest Lectureship* has been put into action this past year. Candidates chosen by each occupational therapy state association for this honor were selected by a delegate board committee and placed upon the A.O.T.A. ballot. Miss Florence Stattel, Chief OT at Kessler Institute, New Jersey, was elected for the 1954 lectureship.

House committee work has continued this year with the committees studying chapters and accreditations. The report of these committees indicate that the state associations wish to preserve the integrity of their present basic state organizational structure, as "affiliated" with the A.O.T.A. Some states definitely indicated they wanted "districts" as a part of their occupational therapy state associations, this to be on a voluntary basis.

The House moved: To recommend to the Board of Management the implementation of the formation of districts on a voluntary basis within the present structure of the state occupational therapy associations.

There has been continued study of the problem of the accreditation of non-professional personnel presently working in occupational therapy departments. The special committee, appointed to investigate the opinions of the state associations relating to this subject, reported their findings. After much discussion it was decided by the House to defer any recommendations to the Board until there was further deliberation, clarification and a definite plan of procedure relative to this very urgent and important subject.

The Minnesota Occupational Therapy State Association announced that they have compiled a *Bibliography on*

Occupational Therapy which may be obtained from the president of this association.

Seven House of Delegates newsletters have been circulated to the state associations during the past two years.

In conclusions, your speaker would like to thank you all for your state associations' outstanding cooperation and continued interest and many helpful suggestions and recommendations which the delegates have conveyed to the House sessions, relative to our many pertinent national issues.

Respectfully submitted,
Marguerite Abbott, O.T.R.
Speaker of House

TREASURER'S REPORT

It is a real pleasure to present the financial report of the American Occupational Therapy Association for the year ending August 31, 1954, and the budget for 1955. The steady improvement of our financial position is something of which every member of the association should be proud. It shows not only the interest of our members but also the careful management by Miss Fish and the office staff. Although we are in a financially sound position we are not affluent. Although we have been able to increase the salaries of the professional and office staff and to take on many activities that we were previously unable to afford, we are still far from having all the money we need for the association. There is still a need for more sustaining members. Without special grants from foundations many needed projects cannot be carried on. An example of two of these are the grants from the National Foundation for Infantile Paralysis for the recruitment of occupational therapy students and the grant from the United Cerebral Palsy Association for scholarships for students. It should be remembered that both our national and educational offices are financed by our own efforts and that grants given to the association are used only for special projects.

Special mention should be made of two items:

The American Journal of Occupational Therapy has not only paid for itself, but also has cleared over \$2,000.00. Our congratulations to Mrs. Murphy. This has been made possible in part by the revenue from advertisements, which, counting those in the Journal and the Yearbook and commercial exhibits, brought in about \$16,000.00 or 1/6 of our income. If this revenue is to be maintained and increased, it will require the backing of every member to patronize the firms who do advertise and make clear when purchasing that you have seen the advertisement in the Journal and/or Yearbook.

The Reserve Fund sheet shows the funds we have available to meet an emergency and the funds reserved for special purposes. It has been the treasurer's ambition to have enough money in the reserve fund to carry the payroll for one year. This year we have nearly achieved this goal. Our total payroll is \$37,800.00 and our usable reserve \$36,825.00.

In closing I wish to stress—

1. Our financial status is sound.
2. We cannot carry on special projects, such as recruitment or the evaluation of occupational therapy departments without special grants.
3. We need the additional support of every member and of every state organization. We are more than grateful for their contributions. We hope that every active member of the association will become a sustaining member by paying \$12.00 a year dues, rather than \$10.00.

Respectfully submitted,
Clare S. Spackman, O.T.R.
Treasurer

FINANCIAL STATEMENT

General Fund

	Actual Inc. & Exp. Year Ending Aug. 31, 1953	Actual Inc. & Exp. Year Ending Aug. 31, 1954	Approved Budget Year Ending Aug. 31, 1954	Proposed Budget Year Ending Aug. 31, 1955
INCOME:				
Endowment	\$	\$ 8.72	\$	\$
Reserve Scholarships & Donations		185.00		
Registration Fees	22,980.00	23,804.50	24,250.00	25,000.00
Membership Dues	22,362.00	23,577.50	22,500.00	23,600.00
AJOT—Subscriptions	13,682.85	14,537.00	14,000.00	15,000.00
—Advertising	9,474.97	12,272.23	9,000.00	12,500.00
Yearbook Sales	164.38	171.00	165.00	170.00
Yearbook Advertising	1,816.37	2,340.37	1,800.00	2,400.00
Sales: Reprints, Insignia, Pins	3,144.67	3,186.69	3,000.00	3,200.00
Volunteer Course	126.00	164.00	125.00	165.00
Conference—prev. year	139.50	5,971.70	4,700.00	7,000.00
—current year	1,287.50	2,632.50	1,500.00	2,700.00
Interest Bank & Bond	602.61	836.53	650.00	850.00
Completion 1954 Grant Projects		970.20		
	<u>\$75,780.85</u>	<u>\$90,658.70</u>	<u>\$81,690.00</u>	<u>\$92,585.00</u>
EXPENSES:				
Natl. Office Procedure Survey	\$	\$ 400.00	\$	\$ 200.00
Purchases: Reprints, Insignia, Pins	1,934.53	1,017.93	2,500.00	2,000.00
Furniture & Fixtures		30.01	300.00	400.00
Depreciation	421.19		470.00	500.00
Payroll	17,468.88	18,537.45	20,000.00	22,000.00
Extra Secretarial Help		194.83	350.00	350.00
Audit & Legal Expense	215.00	300.00	215.00	350.00
Books and Subscriptions	155.75	50.37	175.00	150.00
Office Repairs	172.49	163.42	200.00	200.00
Office Expense & Supplies	1,879.98	1,938.72	1,800.00	2,200.00
Postage & Expressage—General	1,291.57	1,914.24	1,495.00	2,200.00
—Yearbook	1,204.68	1,528.11	1,500.00	1,550.00
Printing—Yearbook	5,512.16	6,798.01	5,700.00	7,200.00
—General	1,226.49	1,530.70	1,300.00	1,500.00
Rent & Light	2,100.00	2,100.00	2,220.00	2,100.00
Telephone & Telegraph	428.56	631.37	500.00	700.00
Travel	1,444.09	1,340.93	2,500.00	2,500.00
Payroll Taxes	1,020.21	976.99	1,250.00	1,250.00
Conference—previous year	500.00	5,700.96	3,125.00	6,000.00
—current year	375.10	318.81	500.00	500.00
Exhibit	194.61	34.00	500.00	500.00
Cooperation with others—	113.00	215.00	150.00	300.00
Recruitment & Publicity	936.43	573.06	2,500.00	2,000.00
Newsletter	1,678.47	1,739.85	1,700.00	1,800.00
Gratuities	136.00	178.50	140.00	100.00
Miscellaneous	341.41	103.62	100.00	100.00
AJOT—Expenses	20,961.52	22,822.50)	23,000.00	25,000.00
—Discount & Commissions	1,342.16	1,821.67)		
Purchase of Bond		500.00	500.00	500.00
Grant to Educational Fund	6,300.00	6,000.00	6,000.00	8,305.00
Reserve			1,000.00	130.00
	<u>\$69,354.28</u>	<u>\$80,115.43</u>	<u>\$81,690.00</u>	<u>\$92,585.00</u>
Excess of Income over Expense	\$ 6,426.57	\$10,543.27		

Educational Fund

	Actual Inc. & Exp. Year Ending Aug. 31, 1953	Actual Inc. & Exp. Year Ending Aug. 31, 1954	Approved Budget Year Ending Aug. 31, 1954	Proposed Budget Year Ending Aug. 31, 1955
Cash on Hand September 1st	\$	\$	\$ 3,630.61	\$
INCOME:				
Grant from General Fund	6,300.00	6,000.00	6,000.00	8,305.00
Examination Fees	4,585.00	5,250.00	4,500.00	6,000.00
Donations	200.00	100.00	200.00	100.00
Sale of Reprints	1,261.75	998.56	1,000.00	1,100.00
Conference Institute		1,125.00	700.00	2,800.00
Payment from school & other sources	100.00	1,035.00	500.00	2,000.00
Bank Interest	67.34	71.31	60.00	
	<u>\$12,514.09</u>	<u>\$14,579.87</u>	<u>\$16,590.61</u>	<u>\$20,305.00</u>
EXPENSES:				
Furniture & Fixtures	\$	\$	\$ 150.00	\$ 150.00
Cost of Reprints	724.57	944.34	850.00	1,000.00
Payroll	5,918.30	7,582.99	7,150.00	7,900.00
Consultants Fee	1,880.00	3,504.71	2,500.00	2,500.00
Computations	835.00	625.00	600.00	700.00
Audit	175.00	175.00	175.00	185.00
Committee Expense	199.74	200.24	300.00	350.00
Conference Institute	41.97	1,090.30	550.00	2,800.00
Examination Expense	577.98	530.92	550.00	550.00
Office Repairs	11.00	41.91	50.00	50.00
Office Expense & Supplies	171.16	266.26	200.00	350.00
Postage & Expressage	279.62	404.81	300.00	450.00
Printing	196.71	273.52	200.00	300.00
Rent	900.00	900.00	1,000.00	900.00
Telephone & Telegraph	232.82	230.57	230.00	240.00
Travel	588.96	578.28	1,000.00	1,000.00
Payroll Taxes	231.87	251.27	300.00	300.00
Miscellaneous	10.50	139.74	15.00	75.00
Depreciation	72.86		80.00	80.00
Special Services		374.00		425.00
Reserve			390.61	
	<u>\$13,048.06</u>	<u>\$18,113.86</u>	<u>\$16,590.61</u>	<u>\$20,305.00</u>
Excess of Expense over Income	\$ 533.97	\$ 3,533.99		
Reserve 1953/54	\$	3,630.61		
Balance of Reserve	\$	96.62		

RESERVE FUNDS—General, Educational & Endowment As of August 31, 1954

Statement of A.O.T.A. Reserve Funds

Cash in Banks and on Hand	\$35,001.77
Cash	\$18,018.49
Savings	14,707.06
Reserve for Scholarships	1,201.87
NFIP-Recruitment	970.20
Accounts Payable	104.15
	<u>\$35,001.77</u>
Investments—U.S. Govt. Bonds..	\$22,800.00
Reserve	\$ 4,100.00
Endowment	18,700.00
	<u>\$22,800.00</u>
Total Cash	<u>\$57,801.77</u>

AMERICAN JOURNAL OF OCCUPATIONAL THERAPY

Another issue of the Journal will be forthcoming in 1955 and will carry abstracts of the speeches of the 1954 conference. It will be published as Part II of the September-October issue. This new copy has been made possible through the financial gains obtained from increased advertising. Therefore by supporting Journal advertisers, members achieve added returns themselves.

Listings of AJOT will now be carried in the Quarterly Cumulative Index Medicus and Psychological Abstracts. Some requirements for articles that will prove helpful in preparing material for publication are:

1. Analyze former material to see if proposed idea is new or advanced.
2. Analyze material to be certain it is on a high professional level suitable for OT's. Avoid orientation material if possible.
3. Pictures and line drawings help illustrate material.

Respectfully submitted,
Lucie Spence Murphy, O.T.R.
Editor

AJOT IX, 1, 1955

EDUCATIONAL SECRETARY'S REPORT

The comparative analysis of the clinical training report (official form) and report of performance in clinical affiliations (experimental form) as initiated in July, 1953, has been completed. From the combined data we find:

1. The RPCA has approximately three times the spread of scores as the CTR.
2. The mean of the experimental form is at a point corresponding to 50% of the total scale range, while the CTR is at the 76% point of its scale.
3. The correlation of .65 between Part I and Part II on all disability areas indicates that the breakdown of student performance required in the first part is objectively reflected in Part II in the total score.

In accordance with the recommendation made at the midyear meetings of the education committees, a special committee was appointed to assist in the revision of the experimental form for official use by January 1, 1955. The membership of this committee represented the schools of occupational therapy and the five major disability areas. A summary of the revision is included in "Nationally Speaking" in this issue of *AJOT*. The report form is now called "Report of Performance in Student Affiliations" (RPSA) in keeping with the new title for the subcommittee on student affiliations. A revised set of instructions to accompany this form (a revised rater's guide) has been prepared with the same previous objective in mind: to promote the standard use of the form by all supervisors in the field.

Two hundred thirty-seven sheets for the occupational therapy career inventory for 1953-54 were forwarded to this office by the nine schools which have used it. A review of these student responses is being conducted to determine if the career inventory is working as anticipated and if not, where and why. Since Part III (specific activities) appeared to be creating the greatest difficulty, the items of this part were re-analyzed. All part III's were rescored with a new key and the revised scores were then checked against the percentile distribution which appears in the manual. It was found that these revised scores were out of line with previous expectations. Therefore, a new percentile scale will be issued for part III in the near future along with the revised keys.

The Picture Craft Company offered four awards of \$150 each for the school year 1954-55. In the administration involved, fourteen applications from nine schools met all prerequisites. The recipients are listed in the June *Newsletter*. As a result of a proposal for undergraduate scholarship consideration submitted to United Cerebral Palsy, a fund of \$15,000 was granted to the AOTA for the school year 1954-55. Scholarships awarded from this fund are not limited to the specialized field of cerebral palsy but are to be used for basic training of undergraduate occupational therapy students in an effort to help increase the over-all manpower source of well-qualified registered occupational therapists. Announcements of the scholarship awards will be published in the *Newsletter* and *AJOT*.

At the invitation of the Office of Vocational Rehabilitation, the executive director reviewed with their staff the needs in occupational therapy for school aid, recruitment necessary to fill the schools and specific school needs such as staff and equipment. The signing of the Vocational Rehabilitation Act Amendment of 1954 (Public Law No. 565, 83rd Congress) authorized the Office of Vocational Rehabilitation to make grants to universities and other institutions training rehabilitation personnel. Instructions pertaining to these grants are being forwarded to the directors of occupational therapy schools by the Office of Vocational Rehabilitation.

AJOT IX. 1. 1955

At the request of the subcommittee on schools and curriculums, a list of possible special services to the schools, with their cost, is being forwarded to school directors for their consideration. These special services are in addition to the area analysis which has previously been furnished. The possible new services include:

1. Further refinements in the area analysis
2. Manual of construction of all types of examination questions
3. Development of a work book to supplement the curriculum guide and/or texts presently used by the schools.

Approval was granted to the School of Physical and Occupational Therapy, State Insurance Fund, Santurce, Puerto Rico by the Council on Medical Education and Hospitals of the American Medical Association at its annual meeting in June. Two new schools are enrolling occupational therapy students for the academic year 1954-55. These are the University of Buffalo in New York and the University of North Dakota in Grand Forks. These schools are in the process of presenting application for approval to the A.M.A.

In accordance with the recommendation made by the Board of Management at the midyear meetings, a small committee is being appointed to study and make recommendations relative to the request from foreign personnel (social workers, physical therapists) wishing to come to this country for limited training in occupational therapy.

Other activities, as in the past, include cooperation with the institute committees, the Council on Professional Services of the American Hospital Association in regards to the occupational therapy institute, assisting in the work of committees, advising prospective students, counseling departments planning to develop student affiliation programs, replying to the varied requests regarding occupational therapy training, and other general duties associated with the education office.

May I express my sincere appreciation for the understanding, interest and cooperation that has been evidenced at all times by the officers, Board of Management, education committee, special committees and individual members of the AOTA during this year.

Respectfully submitted,
Mary Frances Heermans, O.T.R.
Educational Secretary

REPORT OF THE COUNCIL THE FIRST GENERAL MEETING OF THE WORLD FEDERATION OF OCCUPATIONAL THERAPISTS

George Heriot's School, Edinburgh

August 21, 1954

The Council held meetings prior to the congress on Saturday, 14th, and Sunday, 15th of August, also during the congress on Tuesday, 17th, and Thursday, 19th August.

There were present:—

President, Miss M. B. Fplton, M.S.A.O.T., O.T.R.
Secretary/Treasurer, Mrs. G. Glyn Owens, T.M.A.O.T., O.T.R.
Asst. Secretary/Treasurer, Miss Clare S. Spackman, B.S., M.S., O.T.R.
Second Vice President, Miss Ingrid Pahlsson, A.B.T.
Miss Jean MacLeod, A.A.O.T. (Delegate, Australia)
Miss Betty Collins, M.A.O.T., A.A.O.T. (First Alternate, Australia)
Miss May Forsyth, A.P.A., M.A.O.T. (Second Alternate, Australia)
Mrs. Thelma Cardwell, O.T.R. (Delegate, Canada)

Miss H. P. LeVesconte, O.T.R. (First Alternate, Canada)
 Miss Ingrid Pahlsson, A.B.T. (Delegate, Denmark)
 Miss Eva Brostrom, A.B.T. (First Alternate, Denmark)
 Miss Marie L. Jakobsen, A.B.T. (Second Alternate, Denmark)
 Mrs. G. Glyn Owens, T.M.A.O.T., O.T.R. (Delegate, Great Britain)
 Miss G. P. MacCaul, T.M.A.O.T. (Second Alternate, Great Britain)
 Miss Sylvia Napier, N.Z.O.T.A. (Delegate, New Zealand)
 Miss B. Brown, N.Z.O.T.A. (First Alternate, New Zealand)
 Mrs. J. A. Hart, M.S.A.A.O.T. (Delegate, South Africa)
 Miss I. Hildebeck, A.B.T. (Delegate, Sweden)
 Mrs. Ingrid Nystrom, (First Alternate, Sweden)
 Miss Clare S. Spackman, O.T.R. (Delegate, U.S.A.)
 Miss Helen S. Willard, O.T.R. (First Alternate, U.S.A.)
 Miss M. Fish, O.T.R. (Second Alternate, U.S.A.)
 Miss R. Shamah, (Delegate, Israel)
 Mrs. M. Clyman, (First Alternate, Israel)
 Mrs. K. V. Nimbkar, O.T.R. (Delegate, India)

After the credentials of delegates and alternates had been received, the constitution and standing orders were ratified on behalf of the following as founder member organizations:—

Australian Association of Occupational Therapists.
 Canadian Association of Occupational Therapy.
 Danish Association of Occupational Therapists.
 The Joint Council of Associations of Occupational Therapists in Great Britain.
 The Association of Occupational Therapy, Sweden.
 American Occupational Therapy Association.
 New Zealand Registered Occupational Therapists' Association Inc
 South African Association of Occupational Therapists.
 The All India Occupational Therapists' Association.
 Association of Occupational Therapists in Israel.

Election of officers. The president is in office until March 31st, 1957, and therefore no election was required.

The terms of office of the remaining officers had been served and elections were therefore necessary. The result was as follows:—

Re-elected First Vice President: Miss I. Pahlsson of Denmark.

Elected Second Vice President: Miss J. MacLeod of Australia.

Re-elected Hon. Secretary/Treasurer: Mrs. Glyn Owens of Great Britain.

Re-elected Asst. Hon. Secretary/Treasurer: Miss C. S. Spackman of U.S.A.

Fellowships. The Joint Council of Associations of Occupational Therapists in Great Britain nominated the following distinguished friends of the profession for election to fellowships of the World Federation of Occupational Therapists as:

Honorary fellows: Dr. Elizabeth Gasson, O.B.E., Lieut.-Colonel J. Cunningham, C.I.E.

Advisory fellow: Professor Norman Dott, C.B.E.

Membership of the Council. In order to ensure continuity in membership of the Council, it was resolved to establish an initial rotation of the present delegates. Lots were drawn and the following order of retirement established:

1955	Denmark and New Zealand
1956	Australia and Sweden
1957	Great Britain and India
1958	Israel and U.S.A.
1959	Canada and South Africa

Publicity

Publication of proceedings. It was decided that, in spite of financial difficulties, it is essential to publish the pro-

ceedings of the congress so that, in addition to members of the congress being able to obtain a permanent record of the lectures given, the publication would also serve to inform a wider public of the high standards established, the splendid medical support given, and the keen professional interest shown by the attendance of therapists from far and near.

Steps are being taken to make the World Federation of Occupational Therapists more widely known and reports of the congress will be sent to ministers of health throughout the world. It is hoped by the Council that this will result in a wider recognition of the WFOT so that, at future congresses, there will be a great number of official representatives.

Representation in outside organizations. The World Federation of Occupational Therapists has been asked to nominate an official representative to the sixth world congress of the International Society for the Welfare of Cripples which is to be held at The Hague, September 13th-17th. Miss M. Fish, executive director of the American Occupational Therapy Association and second alternate delegate of her country, was elected to represent us at The Hague and appreciation was expressed that we had received, in the invitation to be represented, this early recognition of our status as an international body.

The Council considered the desirability of WFOT becoming a member of the non-governmental organization section of the World Health Organization and so directly linked with the United Nations. It was resolved that application be made for recognition and inclusion.

It was also resolved that it was desirable that WFOT should be represented on the permanent committee of the conference of World Organizations for the Handicapped and that application be made for membership.

Pending a decision by the World Organizations for the Handicapped, the Council of WFOT appointed Mrs. Nimbkar, president of the All India Occupational Therapists' Association and delegate of her association (who is attending the conference of the above organization in Geneva, September 23rd-24th, as representative of the All India Women's Association) to act as an observer.

Conduct of congresses. The chairman of the standing committee on congresses, Miss Spackman, reported that, on the basis of experience gained at this congress, it was her intention to establish a "Guide to the running of World Federation of Occupational Therapists' Congresses," which would serve as a pattern of procedure for future local committees and would save them many of the problems and anxieties which have faced Miss Bramwell's committee.

Deep appreciation of the work done by the congress committee in Edinburgh was expressed.

Finance. The need for increased funds to enable the World Federation of Occupational Therapists to expand its activities was stressed and it was noted that until more money is available it is impossible to establish a permanent office, produce a newsletter or magazine or undertake any large scale publicity.

The hope was expressed that all member organizations and individual members will take steps to raise funds for WFOT so that its work can grow and its position be stabilized.

It was resolved that, in future, congress monies be put into a separate local fund and that, after each congress, any balance in hand be transferred to one of the main accounts.

Development of the profession. Problems relating to the establishment of occupational therapy in countries where it is as yet little known, and where there is no established program of professional education for occupational therapists, was discussed and some stress was laid on the particular difficulties of countries in South East Asia.

It was generally agreed that some form of linkage with the World Federation of Occupational Therapists would assist development and it was recommended that a means to establish such a linkage should be sought.

After consideration by the committee on legislation, under the chairmanship of Miss MacCaul, a recommendation for a change in the articles, which would alleviate the problems, was drafted and will be circulated to member organizations in due course.

Exchange of personnel. It was decided that: enquiries for assistance in the exchange of personnel and requests of a similar nature may be made to WFOT and where possible such requests will be referred to the appropriate member organization before action is taken.

Exchange of information. In order to facilitate the exchange of information, it is recommended that suitable material be recorded on paper, conforming to standard British and United States filing equipment:

8 ins. x 10 ins. (Quarto)

8 ins. x 13 ins. (Foolscap)

Mrs. Nimbkar offered to act as a temporary librarian for any information members may make available for exchange.

Member organizations. The status of a member organization, if at any time it was merged with another dissimilar professional body, was considered. It was felt that this would usually be a problem decided at national and not at international level and that the matter was adequately covered in Article 3, Section 1 of the Constitution.

The Council had an informal meeting with occupational therapists and other interested persons who were from countries where there are as yet no member organizations. News was given of the early stages of development of occupational therapy in a number of countries, and questions raised will be considered by the Council and every effort will be made to give assistance to those who need or desire it.

Meeting of the Council. The next meeting of the Council of the World Federation of Occupational Therapists will be held in 1956 in the United States, during the first two weeks of April.

International congress. The second international congress of the World Federation of Occupational Therapists will be held in Denmark in the summer of 1958.

Signed: Constance Owens

Hon. Secretary/Treasurer.

NOMINATING COMMITTEE

The nominating committee presented a slate of nominees based on the recommendations of the various state associations. The slate was balloted by the membership through a vote by mail. The results of the election are as follows:

President-Elect: Major Ruth Robinson, WMSC; members of the Board of Management: Miss Wilma West (re-elected), Mrs. Elizabeth Jameson (re-elected), Miss Mary Britton, Miss Margaret Gleave, Mr. Laurel Nelson.

Respectfully submitted,

Norma Smith, O.T.R.

Chairman

EDUCATION COMMITTEE

Two developments of major importance to our educational programs, while not directly resulting from the work of this committee, were undoubtedly stimulated indirectly by this committee, by the work of each therapist among us and by the concerted effort of our leaders. The first of these was a grant of fifteen thousand dollars from United Cerebral Palsy to be used for undergraduate scholarships during the 1954-55 school year. On behalf of the education committee, I would like to take this

opportunity to express sincere appreciation to United Cerebral Palsy. The second is the 1954 amendment to the Vocational Rehabilitation Act as passed by the 83rd Congress of the United States. The amendment includes: training grants for the education of rehabilitation personnel, in the forms of (1) teaching grants to assist schools, (2) traineeship grants for teaching personnel and (3) traineeship grants for undergraduates. These two are important milestones in our development.

The following is a summary of the committee work of the year, carried out in small work groups and at the two scheduled formal meetings: at Indianapolis in March, 1954, with approximately 40 members present and at Washington in pre-conference sessions, October, 1954, with approximately 50 members present.

The subcommittee on schools and curriculum reported school enrollment in March as 2425, and in October, with only 25 schools reporting, as 2181. A recommendation went to the registration committee asking that schools be required to abide by the regulation that a student be assigned for a minimum of eight weeks in one affiliating center. It was agreed to undertake the compilation of a bibliography of standard text books used in the schools. It was recommended that a listing of special services from the education office of AOTA be mailed to the schools prior to each examination, with an indication of cost for each service. Dr. James Garrett, office of Vocational Rehabilitation, met with the committee in Washington, to help in an interpretation of the new law. Projects still under consideration include the revision of the *Essentials* for an acceptable school of occupational therapy.

The subcommittee on student affiliations, with the approval of the education committee, changed its name and agreed to the use of the term student affiliations rather than clinical practice or training. The collection of instructional manuals from affiliating centers in the different areas of affiliation (general medicine and surgery, pediatrics, physical disabilities, tuberculosis and psychiatry) was reported. It was recommended that a selected number of manuals from each group be made available on a loan basis from the education office and that the borrower pay a nominal fee for postage and handling. Projects still under study include: (1) the evaluation of occupational therapy departments and student affiliation centers, and (2) a code of professional ethics and etiquette.

In joint session the above subcommittees approved a new student report form (report of performance in student affiliation) and a new rater's guide to accompany the form. It was recommended that the new form be effective January, 1955. It was further recommended that the conversion of the rating into a score be done by the schools during the next year, giving time to further explore the question of central scoring by the education office.

The subcommittee on graduate study has continued the study of and formulation of thought in regard to: (1) study leading to a Master's degree, (2) refresher courses for reorientation, (3) advanced courses for specialization and refinement, and (4) specialization and certification. A statement of purpose and philosophy relative to graduate study was formulated. It was recommended that this statement be published.

The education committee, in considering the problem of affiliations in foreign countries, recommended to the registration committee that students should be required to meet the minimum requirements of nine months of affiliation in the departments of this country (including Canada) to be eligible for examination. Affiliations in other countries should be scheduled over and above the minimum of nine months. Three pre-occupational therapy curriculum guides were completed and approved for use for: (1) secondary school graduates, (2) college transfer

students, and (3) college graduates. A manual of policies and guides for school directors was approved for content and format, as ready for final editing. It was recommended that the manual be duplicated and distributed from the AOTA office. It was recommended that a committee on scholarships be appointed. Consideration was given to the possibility of applying to a foundation for a grant for a long term curriculum study and the committee went on record as "welcoming an intensive and extensive study of the educational aspects and clinical procedures of occupational therapy." It was recommended that application be made to the National Institute of Mental Health for a grant to conduct a short term study institute, that a planning committee with representatives from this committee and from the committee on clinical procedures be set up to work out an institute plan. It was further recommended that this committee be responsible for formulating plans for study projects in advance of need. Projects still under study include: the standard operating procedure for the education committee and the revision of the AOTA standards for training in occupational therapy.

The above reports and recommendations were accepted by the Board.

I have deeply appreciated the privilege of working with the education committee during the past year and would like to take this opportunity to express my thanks to the members of all committees, to the chairmen of the subcommittees: Mrs. Veronica Dobranske for the committee on schools and curriculum, Miss Edna Faeser for the committee on student affiliations and Miss Helen Willard for the committee on graduate study; and to the two occupational secretaries: Miss Martha Matthews, retiring, and Miss Mary Frances Heermans, incoming.

Respectfully submitted,
Marie Louise Franciscus, O.T.R.
Chairman, Education Committee

REGISTRATION COMMITTEE

The registration committee met eight times during the year 1953-1954. Questions from the two examinations administered in 1953 were reviewed in relation to the analysis data to determine their adequacy, the need for rewriting or deletion. New items for replacing those deleted were reviewed and edited and the examinations for the two administrations in 1954 were prepared.

Respectfully submitted,
Mary Frances Heermans, O.T.R.
Chairman, Education Committee

TABLE I

Date	Number of Examinees	Part I Mean	Part I Sigma	Part II Mean	Part II Sigma	Total Mean	Total Sigma	Correlation of Part I and II
Feb. 1953	240	87.95	13.34	87.55	13.14	175.37	25.47	.85
June 1953	214	88.65	13.00	88.55	12.05	176.12	24.87	.86
Feb. 1954	243	89.79	13.90	89.70	13.89	179.53	26.5	.80
June 1954	284	85.55	14.76	85.10	14.73	169.97	28.1	.84

The February, 1954, examination was administered to 243 examinees in 37 different places. In June, 1954, it was written by 284 examinees in 38 different places.

A comparison of the total number of examinees for each of the past four years is shown in the following table:

1951—438	1953—454
1952—469	1954—527

The number of examinees shown above includes graduates of occupational therapy schools in Australia, Canada, Denmark, England, and Scotland as follows:

1951—0	1953—5
1952—8	1954—1

The statistics for the 1954 examinees in comparison with those who wrote the examination in 1953 are listed in Table I.

The stability of the examination continues. Studies of the June, 1954, administration completed to date indicate: (1) the variation is within normal limits; (2) the spread of scores is relatively unchanged; (3) the clinical training reports remain essentially unchanged from the previous administration, as indicated below:

Date	Number	Mean	Sigma
Feb. 1954	221	6.87	0.58
June 1954	272	6.91	0.59

A review of the new items used in this examination will be completed in the near future.

Pursuant to permission granted by the Board of Management at the 1954 midyear meetings, a proposal is being written with the idea of securing financial assistance for undertaking the removal of questions on media techniques from the registration examination and the setting up of an evaluation of this phase in another manner.

The drive for new items will be continued in order to secure additional questions in all areas. The need for new items continues to be urgent.

The registration committee is starting out this fall with four new members, representing four disability areas, with several members continuing to serve from past years.

As well as executing the routine tasks of reviewing and editing of new items and analyzing the examination following each administration, the registration committee has decided policy matters in regard to: consideration of special requests to write the registration examination; clarification of eligibility to the registration examination; recommendation that foreign affiliations be above and beyond the minimum nine months as required by the American Medical Association; consideration of student affiliations under therapists (not O.T.R.'s) in foreign countries.

We wish to extend our sincere appreciation to the members of the registration committee, the item writers and all who have contributed to the registration examination during the past year.

LEGISLATION AND CIVIL SERVICE COMMITTEE

During the past year a number of inquiries have been received from the state associations concerning salary scales, qualifications for occupational therapists, job descriptions and responsibilities of occupational therapists.

A letter was mailed to all state association presidents on June 26, 1954. There was attached to this letter a copy of the chairman's mid-year report to the Board of the legislation and civil service committee and a self-addressed postal card, asking for the name and address of the legislation and civil service chairman of each association. To date 21 replies have been received. It is planned that when the list of state association chairmen has been com-

pleted, copies of this list will be made available to all members.

There has been prepared, in mimeographed form, a four-page list of names and addresses of 64 merit system supervisors and/or civil service officers. This list was given to members present at the committee meeting in Washington, D. C., during the annual conference. Twenty-one members, representing 12 state associations, were in attendance.

On August 31, there was mailed to 63 merit system supervisors and/or civil service officers an inquiry form; a covering letter; a copy of the American Occupational Therapy Association Administrative Practices and Personnel Policies; and a self-addressed, stamped envelope. These offices were also asked to enclose copies of their class specifications and the latest announcements of their occupational therapy and rehabilitation therapy series. A second portion of this report, which covers the results of the survey, can be obtained by writing.

The committee would like to extend its appreciation for the interest that many state associations have shown and for the very kind and capable assistance of AOTA.

Respectfully submitted,
Laurel Nelson, O.T.R., *Chairman*
Dorothy M. Sniffin, O.T.R.
Manuel C. Brown, O.T.R.

Survey of Merit System and Civil Service Offices Re: Occupational Therapy

The response to the questionnaire (inquiry form) was most gratifying, in that 80 per cent of the offices returned the completed questionnaire. In addition, 50 job announcements from 16 areas were received as well as 177 class specifications for occupational therapists and related rehabilitation positions from 27 of the areas. Many of the merit system supervisors and/or civil service officers appreciated having a copy of our "Administrative Practices and Personnel Policies." A number of them mentioned they would be most willing to assist with civil service matters for occupational therapists if there were need for such in the future. This is most encouraging.

The inquiry form asked a number of questions which your committee felt would be of interest to you at this time. A compilation of four of these questions are listed below and designated *a, b, c, d*. Those areas which apparently do not have occupational therapy positions are noted, as well as those areas which did not return the questionnaire. The survey covered the 48 state offices and Puerto Rico, in addition to ten municipalities and four counties.

The four items in the list are:

(a) Salary ranges for the various grades of occupational therapists.

Only those grades which require graduation from an approved school of occupational therapy and registration with the American Occupational Therapy Association are listed. Grades for occupational therapy aides are not included. A majority of the salary ranges were given on a monthly basis and those listed at a weekly or yearly figure were extended or broken down to the nearest dollar for a month.

(b) The department or division in which the occupational therapy positions are assigned.

(c) Types of examination given to an occupational therapy applicant for the positions. These may be: unassembled, oral, written, or other. More than one type of examination may be given.

(d) The type of appointment to the occupational therapy position.

Most usually a probational appointment was listed and

then, after a six months period of satisfactory service, the appointment made permanent.

The merit system supervisors and civil service officers who participated in the survey are to be commended for their cooperation and support. Their interest in our organization and in the work we are doing is most reassuring.

Respectfully submitted,
Laurel V. Nelson, O.T.R.
Chairman

Area No. 1		b. Dept. of Inst. and Agencies	
1. Grade I	\$264-328	c. Oral and written	
Grade II	300-376	d. Probational and permanent	
Grade III	360-450	Area No. 11	
b. Mental Hygiene Dept. and Med. College		a. Grade I	\$180-264
c. Unassembled, oral, written		Grade II	240-315
d. Provisional and probational		Grade III	300-375
Area No. 2		b. Health Dept.	
No OT positions		c. Unassembled	
Area No. 3		d. Probational	
No response		Area No. 12	
Area No. 4		No response	
a. Grade I	\$357-367	Area No. 13	
Grade II	370-408	a. Grade I	\$299-331
Grade III	405-450	Grade II	333-365
b. Psychiatric div.		b. Hospital Div.	
c. Oral and written		c. Oral	
d. Probational		d. Probational	
Area No. 5		Area No. 14	
a. Grade I	\$330-405	a. Grade I	\$309-379
Grade II	440-500	Grade II	394-477
b. Brd. of Health		b. Insts. and Indus. Accident Comm.	
c. Written		c. Unassembled	
d. Provisional or probational		d. Permanent	
Area No. 6		Area No. 15	
a. Grade I	\$240-315	No response	
Grade II	260-335	Area No. 16	
b. Dept. of Inst.		a. Grade I	\$245-320
c. Unassembled		Grade II	293-383
d. Probational		b. Dept. of Health and Hosps.	
Area No. 7		c. Oral	
a. Grade I	\$311-371	d. Permanent	
Grade II	361-426	Area No. 17	
Grade III	381-446	No classified positions (OT)	
b. Welfare Dept.		Area No. 18	
c. Unassembled		a. Grade I	\$352-382
d. Probational		b. Health Dept.	
Area No. 8		c. Written	
a. Grade I	\$315-375	d. Probational and Permanent	
b. Crippled Children's Servs.		Area No. 19	
c. Written		No response	
d. Provisional or probational		Area No. 20	
Area No. 9		No OT positions	
a. Grade I	\$275-344	Area No. 21	
Grade II	371-466	a. Grade I	\$260-300
b. Health Dept. and Psychiatric Hosp.		Grade II	300-340
c. No reply		Grade III	370-420
d. Permanent		Grade IV	505-565
Area No. 10		b. Public Wel. Dept.	
a. Grade I	\$280-330	c. Unassembled, oral, written	
b. Grade II	305-380	d. Probational and permanent	
Grade III	350-425		
Grade IV	350-425		
Grade V	415-515		

- Area No. 22*
a. Grade I \$211-330
Grade II 252-400
Grade III 276-420
b. Public Wel. Dept.
c. Unassembled, oral, written
d. Provisional and permanent.
- Area No. 23*
a. Grade I \$230-280
Grade II 310-390
b. Crippled Children's Comm.
c. Written
d. Probational
- Area No. 24*
No OT positions
- Area No. 25*
No OT positions
- Area No. 26*
No response
- Area No. 27*
No OT positions
- Area No. 28*
No response
- Area No. 29*
a. Grade I \$242-309
Grade II 280-358
Grade III 324-415
Grade IV 415-530
b. Div. of Inst.
c. Oral and written
d. Probational
- Area No. 30*
No OT positions
- Area No. 31*
a. Grade I \$288-355
Grade II 337-417
Grade III 375-464
b. Charities Dept.
c. Unassembled
d. Permanent
- Area No. 32*
a. Grade I \$277-332
Grade II 313-376
Grade III 418-501
b. Rehab. Div.
c. Unassembled, oral, written
d. Probational and permanent.
- Area No. 33*
No OT positions
- Area No. 34*
a. Grade I \$282-334
Grade II 307-363
b. Depts. of Publ. Inst. and Health
c. Unassembled
d. Probational
- Area No. 35*
a. Grade I \$226-276
Grade II 291-356
b. Hosps.
c. Written
d. Probational and permanent
- Area No. 36*
No response
- Area No. 37*
a. Grade I \$290-350
b. Dept. of Mental Health
c. Oral and written
d. Probational
- Area No. 38*
a. Grade I \$273-316
b. Depts. of Pub. Wel. and Health
c. Unassembled
d. Probational and permanent
- Area No. 39*
a. Grade I \$280-360
Grade II 400-480
b. Mental Health and Crippled Children's Comm.
c. Unassembled
d. Probational
- Area No. 40*
No OT positions
- Area No. 41*
a. Grade I \$280-357
Grade II 362-455
Grade III 424-527
Grade IV 608-741
b. Depts. of Mental Hygiene, Health and Social Wel.
c. Written
d. Permanent
- Area No. 42*
a. Grade I \$200-252
Grade II 252-312
b. Institutions
c. Written
d. Probational and permanent
- Area No. 43*
a. Grade I \$290-388
Grade II 335-448
b. Div. of Mental Dis.
c. Oral and written
d. Provisional, probational and permanent
- Area No. 44*
a. Grade I \$260-380
Grade II 295-415
Grade III 335-455
Grade IV 335-455
b. Mental Health Dept.
c. Oral and written
d. Provisional, probational and permanent
- Area No. 45*
a. Grade I \$323-355
Grade II 355-421
Grade III 421-471
b. Dept. of Health
c. Written
d. Provisional, probational and permanent
- Area No. 46*
No OT positions
- Area No. 47*
a. Grade I \$300-375
b. No reply
c. Unassembled, oral, written
- Area No. 48*
No response
- Area No. 49*
a. Grade I \$250-375
Grade II 300-460
Grade III 350-510
b. Div. of Mental Health
c. Unassembled
d. Provisional and permanent
- Area No. 50*
a. Grade I \$310-358
Grade II 341-415
Grade III 358-436
Grade IV 436-530
Grade V 458-530
Grade VI 556-676
b. Depts. of Mental Hygiene and Pub. Health
c. Oral and written
d. Probational and permanent
- Area No. 51*
No response
- Area No. 52*
a. Grade I \$232-284
b. Dept. of Inst.
c. Written
d. Permanent
- Area No. 53*
a. Grade I \$270-355
b. Board of Health
- Area No. 54*
No response
- Area No. 55*
No OT positions
- Area No. 56*
No response
- Area No. 57*
No OT positions
- Area No. 58*
No response
- Area No. 59*
No OT positions
- Area No. 60*
No response
- Area No. 61*
a. Grade I \$310-393
Grade II 383-467
Grade III 433-557
b. Mental Health
c. Unassembled
d. Provisional and probational
- Area No. 62*
a. Grade I \$280-357
Grade II 321-411
b. Dept. of Pub. Inst.
c. Unassembled
d. Provisional
- Area No. 63*
a. Grade I \$312-364
Grade II 364-433
b. Hospitals
c. Unassembled
d. Permanent

COMMITTEE ON CLINICAL PROCEDURES

At the 1953 annual conference of this association, the Board of Management created a new standing committee known as the committee on clinical procedures. As charged by the president, "the purposes of this committee are to define the scope of occupational therapy in each of the specialized areas, to better coordinate the presentation of the field to those with whom we work," and to assist our clinical practice in paralleling the advances in our educational development.

During the short year which has passed since its establishment, the committee on clinical procedures has been organized into six subcommittees representing the five major diagnostic areas in which occupational therapy serves and the field of administration which is common to all. A statement of objectives has been formulated and these, together with a report on our initial organization, were published in the summer edition of the American Journal of Occupational Therapy. Extensive work is under way in subgroups of the committee on our first objective, namely "to define the treatment objectives and functions of occupational therapy in each of the diagnostic areas."

With recognition of the difficulty of the problem we have been assigned but with the optimism of a new endeavor, we hope that we will be successful in three anticipated results: (1) defining the treatment objectives of occupational therapy by diagnostic area; (2) delimiting the functions of the occupational therapist—functions additional to those concerned with treatment; and (3) producing source materials for the practicing occupational therapist.

Respectfully submitted,
Wilma L. West, O.T.R.
Chairman

AJOT IX, 1, 1955

PERMANENT CONFERENCE COMMITTEE

"Capitalize Our Assets" is a worthy motto for the comprehensive program which was launched on Monday with the stimulating and inspiring institute on "Interpersonal Relationships."

Through the fine cooperation of the District of Columbia, the Maryland and the Virginia Occupational Therapy Associations we are able to bring you a program of important significance. You will recognize, I am sure, the tremendous effort and the efficiency that has been necessary to coordinate this function among these three state groups. Particular credit is given to our local general chairman, Miss Mary Beach, and her co-chairman, Mrs. Arvilla Merrill; Miss Elizabeth Messick, the program chairman; and Miss Ruth Brunyate, chairman for the institute. Travel from the neighboring states for many of the committee members to attend meetings has made their work arduous.

The institute has taken on a new form this year and has already proven to be a very stimulating and challenging experience. The subject and content of these institute programs is influenced by your expression of choice for succeeding annual meetings. The local committees are guided by the combined thinking and experience of the permanent conference committee, your president, and the professional staff of our AOTA headquarters. Nevertheless, the local chairman and the committees must of necessity be influenced, aided, and sometimes limited by the resources available in the conference locations. This is good since it prohibits any static pattern of program and affords opportunity for the presentation of a broad scope of subject matter and demonstration in the various areas of occupational therapy.

Your attention is called to exhibits. The commercial exhibit is bigger and better than ever with 34 booths—which is the largest number that we have ever had. An effort has been made to broaden the scope of our commercial exhibit material. We've made a start this year with a few firms showing appliances and equipment other than supplies and materials used for the skills of occupational therapy. Let us know any new ones that you use, perhaps we can convince the manufacturers that they should display their products at our annual conference.

The same is true of the educational exhibits. You have contact with organizations and agencies which dispense valuable information of vital interest to occupational therapists. If they aren't included in our educational exhibit tell us about it.

By now you are all familiar with the prize drawing which will take place at the exhibitors party before the banquet on Thursday evening. Your participation in the prize drawing depends on your viewing each exhibit to have your card punched at each booth. These prizes are the contribution of the exhibitors' organization called "The Ship," so be ready and on hand to sail forth with The Ship on Thursday evening before the banquet.

The conference next year is to be at the Palace Hotel, San Francisco, California, October 22-28th. The Northern California OT Association is hostess for this meeting with the possible assistance from some of neighboring associations. Extensive planning is already under way. The local general chairman is Mrs. Louise Burton Wade and the institute chairman is Mary Booth, of San Jose State College. Anne Turchi, formerly of Mills College, will be program chairman.

The 1956 conference is scheduled for Minneapolis, Minnesota, at the Nicollet Hotel. The dates of September 29th-October 5th have been determined in order to enjoy preferable weather conditions in this northern location. The local general chairman will be Genevieve Anderson.

Some of you have expressed the wish to meet in the resort type of situation. I would remind you that the re-

sort type of location does not generally offer the necessary facilities for a conference of our scope. A very vital factor in our conference is the state association with its local conference committee. The focal point of operation in these state groups is rarely in close proximity to resort accommodations. Since every single member of the state groups must be available for many hours over many months to organize the conference, consideration must be given to their convenience.

In closing I want to express for the permanent conference committee and the association sincere appreciation to each and every member of the Washington, Maryland, and Virginia Associations who has given unstintingly of his time, energy, and means to bring to you this remarkably successful conference.

The operating procedures and reevaluation of our ways and means must be currently revised. This is your annual conference and we welcome your comments, ideas and suggestions toward bigger and better meetings.

Respectfully submitted,
Winifred C. Kahmann, O.T.R.
Chairman

SPECIAL STUDIES COMMITTEE

A year and one-half ago the functions of the special studies committee were reviewed and revised to develop interest in and assist with setting up special studies that could be carried on in the five major fields of occupational therapy; to act as a clearing house for studies already in process that others may review when initiating similar projects; and to form a subcommittee under the direction of Mrs. Veronica Dobranske to establish policies, and formulate plans for the establishment of a national laboratory to test special equipment.

In spite of repeated announcements in AJOT, the Newsletter and through the House of Delegates there has been no material brought to the attention of this committee. It places me in the unique position of being the only chairman to report to you that no progress has been made.

Following the very enthusiastic reception this committee received when it met in an open meeting at the Houston convention it has been difficult to put our finger on what has failed to make it click. The committee has felt that many factors enter into it. It was with a great deal of thought that your chairman reached the conclusion to submit to the Board of Management that this committee be discontinued. This was done at the Board Meetings, Monday, October 18. It was heartwarming to have the Board review this "problem child" committee in a most practical manner. They gave generously of their time and thought during a busy schedule. It acted as a "shot in the arm" to me, which I wish I could pass on to each of you.

Conclusions reached were that the committee should continue to function but with a change of emphasis and a change of implementation. They were well aware that occupational therapists in the field were making many progressive developments. They were also well aware that each of us working in the field could profit by what the other is doing.

Therefore, the committee is now charged to catalogue *effects in devices, procedure techniques and recording methods* which you as individuals are constantly inventing and developing. These are things of value that can be helpful to the whole membership if only they are made known.

There are several ways in which the special studies committee expects to obtain material on these devices, techniques and methods: The first three have been tried but with little or no success. All we can do now is plead

with you to respond to: (1) our requests through AJOT; (2) our requests through the Newsletter; (3) our requests through the House of Delegates; (4) reporting from the school representative visiting student affiliations; (5) voluntary response from each of you individually.

Please send us drawings, photos or descriptions of effective devices; descriptions of procedural techniques and copies of recording methods. Only if this material can be collected can it be made available to others. Only when it is made available to all others will it stimulate effective developments.

Respectfully submitted,
G. Margaret Gleave, O.T.R.
Chairman

RECRUITMENT AND PUBLICITY COMMITTEE

Although figures relating school enrollment to the recruitment program are unavailable, a tremendous amount of work has been done since the last annual report and it is felt that this has been a very successful year. We have received a gratifying amount of publicity, and it is impossible to compute the total number of contacts that have been made.

The most outstanding recruitment news during the year was the announcement that the National Foundation for Infantile Paralysis had decided to renew the grant which we received for the first time last year. The amount of this year's grant was increased, as Miss Fish reported. This will enable the association to hire a *full-time* recruitment and publicity director as well as to continue work in progress. The demands of a growing recruitment program in the face of increased and unprecedented recruitment pressure on the high school graduate from other sources make a full-time program a necessity.

A manual for recruitment chairmen has been written under the auspices of the National Foundation for Infantile Paralysis, and was issued to all recruitment chairmen. The manual outlines the association's recruitment program and relates it to the various media which can be used by local committees.

Excellent work by the recruitment committees in the various states has come to be the expected thing, and this tradition has been carried on faithfully this year. It would be too time-consuming to list the accomplishments of all the committees. However, a survey taken about midyear, covering half of the total effort, showed all of the committees were using speakers' bureaus to good effect. Over half were using newspaper releases, career days, library contacts and vocational guidance contacts. Over one-fourth were using television, radio, window displays and exhibits.

That activities are being carried on vigorously is shown by the fact that, in addition, the survey reported over 25,000 mailings of literature. One committee reported contacts with 645 high schools and 350 libraries during the twelve months preceding the report. Another reported a television show with an audience estimated at 400,000.

The committees themselves felt that their most successful projects were: personal contacts, hospital day events, team demonstrations at high schools, career days, open houses, contacts with vocational guidance counsellors, talks and personal letters.

In reviewing the activities of the state committees and attempting to assess the results, one often loses sight of the goals because of enthusiasm over the hard work and accomplishments of the state units. A reorientation becomes necessary along these lines:

a. What is the goal of the recruitment effort? Overall, it is simply to convince as many young people as possible that occupational therapy is the best possible career choice they can make.

b. Who is responsible for achieving this goal? The responsibility for recruiting young people into occupational therapy rests squarely on the shoulders of each and every member of the association. This is an obligation one assumes in becoming a member, since the need for recruitment has the support of the association which consists solely of members.

c. If the individual member is responsible for recruiting, what is the function of the state and national recruitment committees? These units exist in order to facilitate the recruitment efforts of the individual member. The printed materials which these committees send out, the speeches, the library contacts, exhibits and all the other materials are for the purpose of disseminating information about the career of occupational therapy; to make the potential careerist aware of it and interested in it; and thus make it easier for the occupational therapist to guide him in making his final choice in favor of occupational therapy. A tour through the commercial exhibits at this conference will reveal that no exhibitor depends on his display and advertising alone to sell his product. It still takes a *salesman* to get the buyer's name on the dotted line. In the same way, each and every occupational therapist should do his best to follow up the speeches, publicity and literature his state recruitment committee has worked so hard to present to the public.

Recommendations That during the ensuing year efforts be redoubled to impress occupational therapists with the importance of each individual's obligation and responsibility for recruitment.

Respectfully submitted,
John D. Redjinski, O.T.R.
Chairman

STATEMENT OF POLICY ON ADVANCED STUDY

Policy. As one of the auxiliary services, occupational therapy contributes to the maximum rehabilitation of the sick and injured. Its effectiveness is largely determined by the education and skill of the therapist. With constant advances being made in the treatment and total rehabilitation of the patient, it becomes important that educational standards and opportunities be continually developed. The practicing occupational therapist, himself, must endeavor to undertake and maintain a program for increasing his own competence. Furthermore, the range of performance required of the therapist is now much broader than that included in present undergraduate curriculums. The teaching and expert supervision of students at the university or clinical level, and the development of highly specialized treatment programs for particular disability groups are among the requirements made of the therapist of today for which he should properly seek additional training, the basic prerequisite to professional progress.

Methods. In implementing this philosophy, it is emphasized that such study may be in any one of several forms, such as the following:

(1) Graduate study. Academic courses taken in the college or university setting, on a full-or part-time basis, with credit granted toward a high academic degree in occupational therapy or in an allied field.

(2) Advanced courses in special areas. Academic study in a college or university, or practical instruction in a clinical setting, either with or without credit, designed

to increase particular knowledge and skill in specific fields, such as cerebral palsy, poliomyelitis, neuropsychiatry, etc.

(3 Refresher courses. Formally organized academic study in an occupational therapy curriculum or supervised clinical experience designed to re-qualify the therapist who resumes practice after a period of professional inactivity or to fortify the competence of those who may change from one specialty area to another.

Areas for Study. It is emphasized that there are four major diagnostic and professional areas of occupational therapy in which advanced educational qualification is urgently needed at the present time: physical disabilities; neuropsychiatry; child growth and development; and administration and personnel supervision.

Responsibility. (1) It is the responsibility of the organized schools of occupational therapy to keep informed of developing concepts and techniques in rehabilitation and to be cognizant of the changing educational needs of the profession. In recognition of these concepts and needs, the schools should give careful consideration to the development of such educational opportunities (outlined above) as may be indicated for practicing therapists and for which they could insure adequate standards.

(2) The practicing therapist himself, on whom all patient treatment depends, must give serious thought to undertaking a plan of continued study so that the service of occupational therapy may continue to grow and keep pace with other auxiliary and medical services in the care and treatment of the patient.

Prepared by:

The Subcommittee on Graduate Study
of the Education Committee
AMERICAN OCCUPATIONAL
THERAPY ASSOCIATION.

Book Reviews and Abstracts

PRINCIPLES OF OCCUPATIONAL THERAPY

Second Edition

Helen S. Willard and Clare S. Spackman

Published by

J. B. Lippincott, Philadelphia

1954

370 pp.

Reviewed by: Caroline G. Thompson

With the appearance of the new edition of *Principles of Occupational Therapy*, we are again indebted to the editors for a long step forward in the consolidation and systematization of our knowledge, to the present day, as it affects occupational therapy. This edition gives us new material on the treatment of various disabilities, written again by occupational therapists who are well qualified by experience to describe current practices in their fields.

Major revisions have been made in the chapters on mental illness, blindness and cerebral palsy. A discussion of the treatment of hemiplegia, paraplegia and multiple sclerosis has been included in the chapter of physical disabilities, and new sections have been contributed by other authors on poliomyelitis, adapted equipment and geriatrics. These extensive additions make the volume a "must" for the reference shelf of every up-to-date occupational therapy department treating patients in these disability groups.

A new chapter on organization and administration, by Captain Wilma West, combines philosophy with helpful suggestions in a clear delineation of essentials in this art which for most of us is a learned process. This book will be an invaluable aid to the instructor of occupational therapy students since it presents in succinct form the fundamentals of their future profession.

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SOCIAL ASPECTS OF DISEASE

Arthur Leslie Banks, M.A., M.D.

Professor of Human Ecology at Cambridge University

Edward Arnold and Co.

London

1953

373 pp, \$4.05

Reviewed by: Caroline G. Thompson, O.T.R.

A very readable book, up-to-date and accurate. The author discusses disease by systems, i.e. respiratory, endocrine, etc., gives briefly the history of treatment and the current care, prognosis, management, special living conditions it entails, cost, reactions natural to the patient. A sample of his style: re diabetics: "Thirty years ago these patients were admitted to hospital in coma. Their care differed little from that of other hospital patients. Today, they have special out-patient facilities, special diets and extra rations and medical and social aftercare which extends for the patient's life. The cost to the community of this disease is therefore high. Fortunately diabetic patients are usually intelligent and valued members of the community."

PRIVATE WORLD OF PAIN

Grace Stuart

Allen and Unwin, Ltd.

London

1953

\$2.50

Reviewed by: Caroline G. Thompson, O.T.R.

A very sensitive and unsentimental account of being an arthritic patient, and the attitudes encountered in oneself and others that bear on adjustment to chronic illness while a young person and through the middle years. Includes the advent of cortisone. Setting: England. Of fascination to any therapist dealing with psychological reactions, and very well written.

WEAVING HANDCRAFT

Marthann Alexander

McKnight & McKnight

Bloomington, Ill.

1954

91 pp, \$1.25

A well illustrated book describing fifteen of the simple weaving processes. An excellent reference book for the occupational therapist who does not use these methods every day so needs to refresh his memory. Also excellent for therapists for easy-to-do but attractive weaving projects.

To mention a few processes discussed, the ones most common to occupational therapists are Hungarian, finger, spool, waffle and card weaving as well as inkle and two-harness loom weaving.

TABLES YOU CAN BUILD

Lane Publishing Co.

Menlo Park, Calif.

1954

48 pp, \$1.00

An excellent reference book of table designs mostly in the contemporary style. Clear pictures and detailed drawings enable one to plan and execute the finished product easily.

REPRINTS

Reprints are convenient for teaching files in hospitals. If you would like a few copies of articles appearing in this issue, your order will be honored if enough requests from others are received to total the minimum order of 50 for an article. Place your orders before the 25th of the month of publication.

ROTATING ELECTRICAL MACHINERY

Crow Electri-Craft Corp.
Vincennes, Ind.

1954

256 pp, \$3.50

A manual with a practical, simplified approach to the study of AC and DC machinery. Virtually no mathematics is used so that instructors need only limited electrical experience.

An excellent aid for patients interested in machinery since more space is devoted to illustrations than to text.

NEUROPHYSIOLOGICAL REACTIONS AS A BASIS FOR PHYSICAL THERAPY

Margaret Rood, M.A., O.T.R.

Physical Therapy Review

Vol. 34, No. 9, Sept., 1954

Reviewed by: Caroline G. Thompson, O.T.R.

Miss Rood's stimulating and suggestive discussion of treatments for cerebral palsy opens many areas for thought and question. It is evident that here is a treatment that has proved clinically effective and is interesting from that point of view. Sensory stimuli such as touch, cold and pressure are used to evoke motor response in paralyzed muscles through a reflex pattern. Sensory stimuli have been used before in physical therapy, particularly in the care of the poliomyelitis patient. In support of her method of treatment, Miss Rood adduces principles of physiology. As new light is thrown on localization and the functioning of the nervous system, we are less sure of some of these. However the principal doubt arises in connection with the way these principles are associated with one another and with the treatment in explanation. They do not make for a coherent whole. One has a disturbing feeling of non-sequitur.

Because historically gems of discovery often lodge in such bold intuitions, and can be later organized by others into a logical system, it would be valuable to have clearer descriptions of the exact procedures used by the therapist in carrying out her treatments. Although the explanations may be subject to question and the connection of the principles with treatment have at present only the force of a hypothesis awaiting development, the results of treatment suggest a clinically interesting and hopeful picture. It has potentialities which deserve a trial.

A CONTRIBUTION TO A DYNAMIC THEORY OF INTELLIGENCE TESTING OF CHILDREN

Erika Fromm, Ph.D., Lenore Dumas Hartman, M.A.,
and Marian Marschak, Ph.D.

Journal of Clinical and Experimental Psychopathology
and

Quarterly Review of Psychiatry and Neurology
Vol. XV, No. 2, June 1954

Reviewed by: Barbara Locher, O.T.R.

In the words of the authors, this is a theoretical paper. Results are based purely on the systematic theoretic analysis of all variables that could possibly be involved in a child's passing or failing a particular task. For this end, the authors have also brought up from their memory and experience the many hundreds of children they have tested over the years and their common or individual ways of dealing with the test tasks at hand.

For occupational therapists in general this article should serve as reference material. Research minded therapists working with the child patient will be particularly interested in this scholarly, detailed report of research which includes very interesting charts and tables.

A FATAL CASE OF ETHYLENE DICHLORIDE POISONING IN AN OCCUPATIONAL THERAPY DEPARTMENT OF A NEUROPSYCHIATRIC HOSPITAL

S. C. Garrison, M.D.

Roy S. Leadingham, M.D.

American Journal of Physical Medicine

August, 1954

Reviewed by: W. R. Dunton, Jr., M.D.

An account of the death of a young Negro schizophrenic with description of the pathological findings following the ingestion of a considerable quantity of Ethylene Dichloride which was being used for a plastic product. This solvent is especially poisonous when taken into the stomach yet there was no poison warning on the bottle and its sweetish odor seems to make it attractive to those ignorant of its poisonous qualities.

As a safety measure to avoid a recurrence of such an accident the authors have adopted the following precautions:

1. It is now available only in 50 cc. containers with stericap seals.

2. Instructions specify that it shall be withdrawn and placed on the edges of plastics by the therapists instead of by the patient, and the containers will be kept in their possession until they are returned to a safe-keeping place in the shop.

It is hoped that similar precautions will be taken in other shops where this chemical may be used in order to prevent similar suicides.

DELEGATES DIVISION

CONNECTICUT

Delegate-Reporter, Ruth M. Dalton, O.T.R.

The C.O.T.A. has been primarily concerned with the appointment of a historian, in recruitment, joint physical and occupational therapy meetings, and increase in annual dues.

Connecticut is proud to announce the appointment of Miss Bertra Piper as historian. She is doing an excellent job compiling and editing the history of C.O.T.A. To put history in a lighter vein, Miss Piper has written a most delightful poem highlighting the growth of OT in Connecticut.

Our recruitment chairman has reorganized and pulled together a larger and more effective committee. It is hoped that the State Department of Education will allow us to enclose some of our recruitment material in their mail sent out regularly to the schools throughout the state.

It is the desire of one of the C.O.T.A. members to begin a news bulletin. We are all looking forward to this bulletin and feel that it will bring more unity among the OT's throughout the state as well as serve as a clearing house for announcements of current activities and conferences concerning OT and our auxiliary professions.

The C.O.T.A. and the Connecticut Physical Therapy Association have had two joint meetings. The programs have consisted of a lecture on clinical psychology and films.

It has been necessary for Connecticut to raise the annual dues from \$3.00 to \$4.00 per year due to an increase in current expenses.

OFFICERS

President	Alice Rogers, O.T.R.
Vice-President	Mildred Sleeper, O.T.R.
Recording Secretary	Suzanne Griselle, O.T.R.
Corresponding Secretary	Mary Fiorentino, O.T.R.
Treasurer	Ann Drag, O.T.R.
Alternate Delegate	Francis Miller, O.T.R.

AJOT IX, 1, 1955

IOWA

Delegate-Reporter, Rachel Baumgartner, O.T.R.

The Iowa therapists meet three times a year at different points in the state so that the problem of our scattered geographical locations is somewhat overcome. We have good turn-outs at these meetings which are of a day-long program, including a number of special speakers and a lively business meeting. Many of our biggest projects are carried out in this same sectional plan, for the pure convenience of geography. For instance, we have found that our most successful method of having an affluent treasury is to hold rummage sales. Since we cannot all journey to one point to help in this annual event, and it is too big a job for one center to handle alone yearly, we are alternating cities each year. However, rummage is collected from the other centers at each meeting.

One of our shining goals is being realized through our accelerated efforts in the ways and means department in that we are developing a foundation for a scholarship fund. This need has long been felt in our state. At present while our fund is building, we are making small loans available to students now taking training.

Our membership remains fairly constant. We have 28 active members, 10 state active, five associate. Many excellent vacancies still exist in Iowa, especially in psychiatric, cerebral palsy and rehabilitation centers. While we have been fortunate in having an increase of opportunities for recruitment, this will not fill these immediate needs. Those interested contact our placement chairman, Miss Elizabeth Collins, O.T.R., for more information.

OFFICERS

President.....Jean Ehrenhaft, O.T.R.
Vice-President.....Jean McNie, O.T.R.
Secretary-treasurer.....Betty Lou Lacina, O.T.R.
Delegate.....Rachel Baumgartner, O.T.R.
Alternate-Delegate.....Maxine Ferrell, O.T.R.
Newsletter Editor.....Harold Shalik, O.T.R.

MISSOURI

Delegate-Reporter, Leonelle C. Gamble, O.T.R.

The Missouri Occupational Therapy Association had seven meetings during the last year. At our October meeting, as has been our custom for the last two years, we welcomed the Washington University OT students to our association. We are fortunate in having this school located in St. Louis, this city being the headquarters for M.O.T.A. This was our usual supper meeting at which each member sponsored one or more students as guests. These annual meetings have stimulated the interest of the students and last year twenty-four students joined our association.

Another meeting of interest was the joint M.O.T.A. and Eastern Missouri Chapter of A.P.T.A. which was planned by the physical therapists this year. A panel discussion by patients who had been treated in the respective clinics gave a lively and revealing resume of the treatment techniques from their viewpoint. The therapists had the opportunity of seeing themselves in a different light.

At one of our meetings we endeavored to call to our members' attention some of the metropolitan St. Louis community resources. Representatives from International Ladies Garment Workers' Union Medical Center, Labor Health Institute, Volunteer Service Bureau of the Social Planning Council and People's Art Center gave reports of their organizations' contributions to health and welfare.

A project undertaken to bolster our treasury was the sale of white ball point pens decorated with a blue caduceus.

AJOT IX, 1, 1955

The recruitment committee continues to function at a high level, consultants and speakers to High School Career Days were active. Recruitment material from the national office was mailed to the superintendents of all the hospitals in Missouri.

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Education Office . . .

(Continued from page 27)

The supervisors of the student affiliations are not being asked to score the report form. It was voted at the joint meeting of the education committees at the 1954 annual conference that the schools would be responsible for the scoring of the report forms for the first year. It is, therefore, the responsibility of the schools to total the score and assign the letter grade it deems appropriate to the distribution of scores obtained by its students on the total report form.

The rater's guide has been rewritten with the same previous objective in mind—to allow all supervisors in student affiliation centers to interpret and complete the report form properly and accurately. This is done by utilizing standard definitions and procedures set forth in both the report form and the guide.

The cooperation of all clinical supervisors throughout the experimental year has been most appreciated. The completion of two report forms for each student has meant extra time and work. The objective criticism received has also been vital to the preparation of the new official form. We are likewise grateful to the special committee which worked so hard to refine and revise the experimental form.

All of you—clinical supervisors and school directors—have been striving over the past years to develop a report form which will permit you to render a more accurate report of what you have seen the student do in your department. This new report form is the result of hard work, financial output and vision on the part of the members of the American Occupational Therapy Association and gives us a basis for progress of which we can be proud. It represents an accomplishment well in advance of other comparable professional groups.

You can help get the RPSA off to a good start by using it well. Study the rater's guide carefully and review it at frequent intervals. Your evaluation is the only tangible indication of the student's performance. Therefore, you will want to devote considerable time and care to making it an accurate appraisal. Sending only well-trained graduates

into the field is the most effective means of furthering the growth of occupational therapy as a profession. We hope you will use this new form for counseling and guiding your students to help accomplish this.

Mary Frances Heermans, O.T.R.
Educational Secretary.

Proprioceptive Facilitation . . .

(Continued from page 9)

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Activity . . .

(Continued from page 21)

Chronic psychotic patients who were seriously impaired in their ability to communicate verbally were selected for this project. The occupational therapist was the central figure in the project, being present at all meetings, and responsible for directing the activities. A natural, sincere, friendly, consistent and self-assured approach on the part of the occupational therapist was most important. She had to deal with patients having problems of shyness, sensitivity, preoccupation, hostility, withdrawal, confusion and depression. It was the occupational therapist who was primarily responsible for developing group identity and group spirit.

Progress with these patients was slow, but encouraging results were obtained by maintaining a consistent approach. Both supportive verbal groups and activity groups with chronic psychotic patients have been beneficial. However for those particularly handicapped in verbal expression, activity group therapy seems to be the more effective group method.⁴

REFERENCES

1. In addition to the writers of this paper, persons participating in these discussions in November and December, 1950, included: Dr. John J. Prusmack, Chief of Professional Services; Dr. Julius M. Wallner, Chief of Neuropsychiatry; Dr. Martha MacDonald, Chief of Professional Education; Dr. Maurice Grossman, Chief of Physical Medicine; Dr. James Ferguson, Chief of Continued Service; N. Meryl Van Vlack, Chief of Occupational Therapy; Raymond W. Craig, Chief of Social Service; Dr. Ben Finney, clinical psychologist; Dr. Bernard Brownfield, psychiatrist.
2. Personnel participating in the second project were: Dr. Ben Finney, clinical psychologist; Dr. William Grove, chief clinical psychologist; Laurella Frakes O'Brien, occupational therapist, and others.
3. Miss Isabel Koch was the woman social worker during the first year of the project. She left the staff and was replaced by Miss Mary Hansen who participated in the project during the second year.
4. Reviewed in the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the authors are the result of their own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

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Fairfield State Hospital, Newtown, Conn. Occupational therapists and senior occupational therapists. \$3,120-\$4,620; 40-hour week; well-equipped working units; good living facilities; clinical training program.

Staff occupational therapist for cerebral palsy department, N. Y. S. Rehabilitation Hospital, West Haverstraw, N. Y. Civil service position; New York State Department of Health; 40 hour week. Starting salary \$3251. Contact Director, Dr. A. J. Canning.

Supervisor of occupational therapy desired in outpatient rehabilitation center. Emphasis of service: A.D.L., kitchen activities, work evaluation and build-up program, functional crafts. Staff occupational therapy position also available. Write: Dr. K. C. Keeler, Director, The Rehabilitation Center of Summit County, Inc., 326 Locust Street, Akron 2, Ohio.

Wanted: O.T. for a cerebral palsy treatment center. Well-equipped. Congenial staff. Close med. supervision. Good salary and working conditions. Scholarship available for additional training in C.P. H. L. Rudolph, M.D., 400 N. 5th St., Reading, Pa.

Positions for occupational therapists and senior occupational therapists with the State of Connecticut. Present openings at Undercliff Hospital, Meriden; Woodruff Center, New Haven, Connecticut; and Veterans' Hospital, Rocky Hill, Connecticut. Challenging shop programs, both male and female, therapy on rehabilitation wards and clinical training programs. Salary \$3,120-\$4,560. Senior \$3,540-\$4,980. Living accommodations. Liberal vacation, sick leave and retirement benefits. Excellent working conditions. Positions under civil service. Write or telephone the State Personnel Director, Room 465, State Office Building, Hartford, Connecticut, or the Medical Director, Commission on the Care and Treatment of Chronically Ill, Veterans' Hospital, Rocky Hill, Connecticut.

Occupational therapist—cerebral palsy experience preferred. Dutchess County Cerebral Palsy Ass'n, Inc., Poughkeepsie, N. Y. 5 day week—salary open.

Wanted: registered occupational therapist for 220-bed tuberculosis hospital 25 miles from New York City. \$3,600 to \$4,000 and meals. Middlesex County Tuberculosis and Health League, 11 Remsen Avenue, New Brunswick, N. J.

Director of O.T. to expand program in state mental hospital. College graduation, registration, and four years experience, two supervisory, required. Salary range \$4,500 to \$6,420. Paid vacation, sick leave, retirement plan. Maintenance available. Write H. A. Barnhizer, Personnel Director, Division of Mental Health, 1315 W. 10th Street, Indianapolis, Indiana.

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Wanted: registered occupational therapist to direct program in large mental hospital, salary up to \$4,800 with maintenance available for \$456 per annum; paid vacations, holidays, sick day allowances, retirement program. Civil service. Send transcript training and experience to Dr. Daniel Haffron, Superintendent, Elgin State Hospital, Elgin, Illinois.

Position available: Staff position open for a registered occupational therapist in a pediatric hospital. Salary commensurate with experience and qualifications. Liberal personnel policies including 40 hour week. Volunteer and student nurse training program. Apply Director of Nursing, The Children's Memorial Hospital, 707 W. Fullerton Ave., Chicago 14, Illinois.

Immediate opening for registered occupational therapist in physical medicine department of large, modern general hospital. To work both on hospital's diagnostic psychiatric unit and in convalescent department. Salary \$3,100 annually, 38-hour week, paid vacations, sick leave, free hospitalization, social security, liberal retirement plan. Live-in accommodations available. Write Mr. Anthony S. Amenta, Personnel Director, Hartford Hospital, Hartford, Connecticut.

Permanent position for occupational therapist: graduate of accredited school, good starting salary with regular increases; to work with children up to 21 years of age. 40-hour week, vacation with pay, sick leave, etc. 100-bed orthopedic hospital; new, modern department. Write Miss Anna B. Quinn, R.N., Administrator, Kosair Crippled Children Hospital, 982 Eastern Parkway, Louisville, 17, Ky.

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O.T.R. for out-patient cerebral palsy treatment center. \$3,000.00 minimum, with no experience; salary open if experienced. Three weeks summer vacation, sick leave, holidays, yearly increments, 5-day week, train commuting possible from New York City. Call or write: Gloria D. Sosnowski, O.T.R., Coordinator, 277 Bertrand Ave., Perth Amboy, N. J., Hillcrest 2-1806.

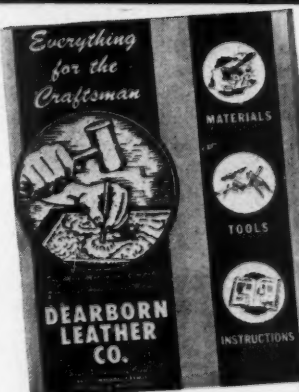
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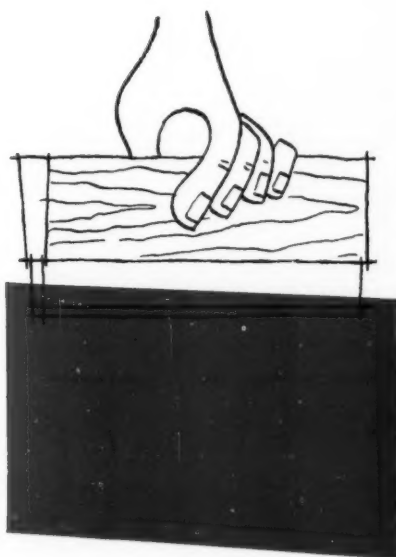
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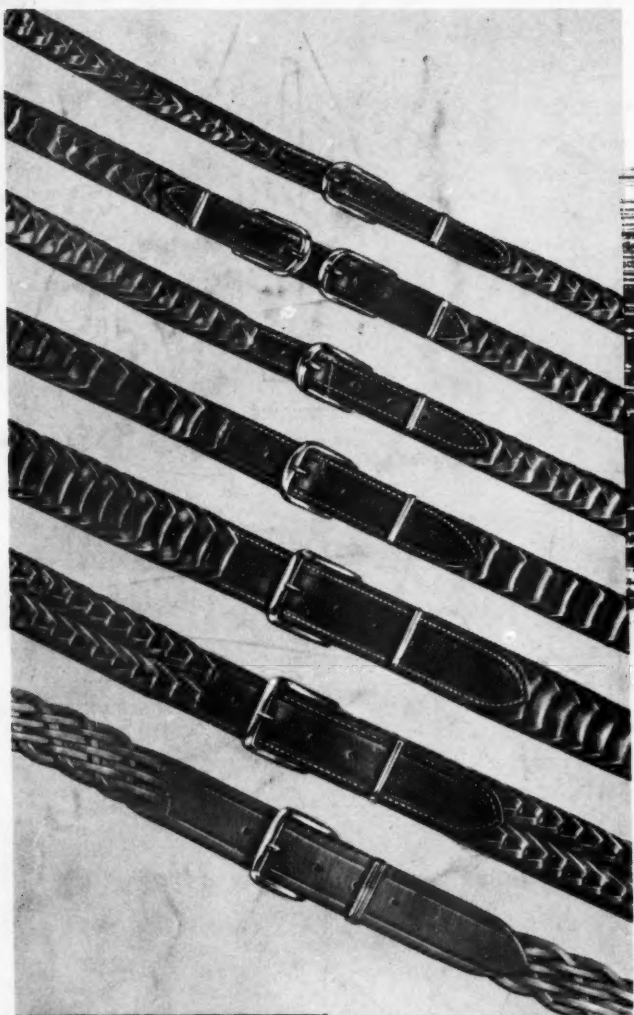
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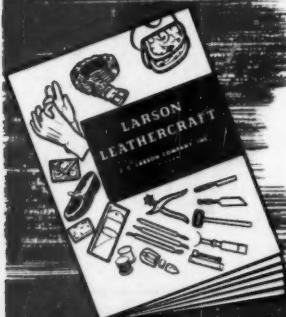
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THE AMERICAN JOURNAL of OCCUPATIONAL THERAPY

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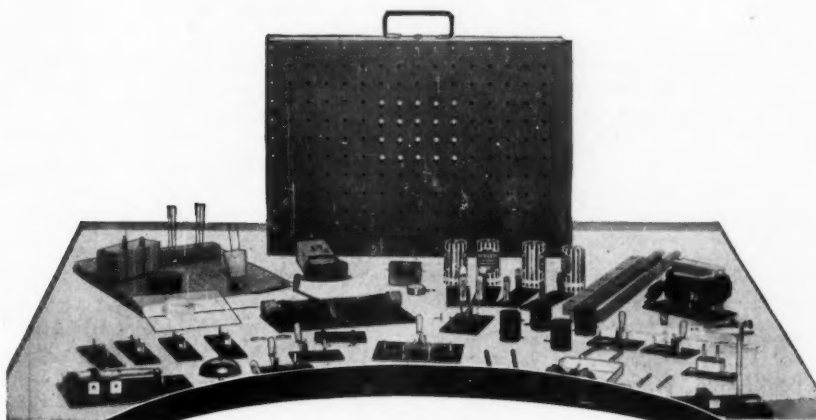
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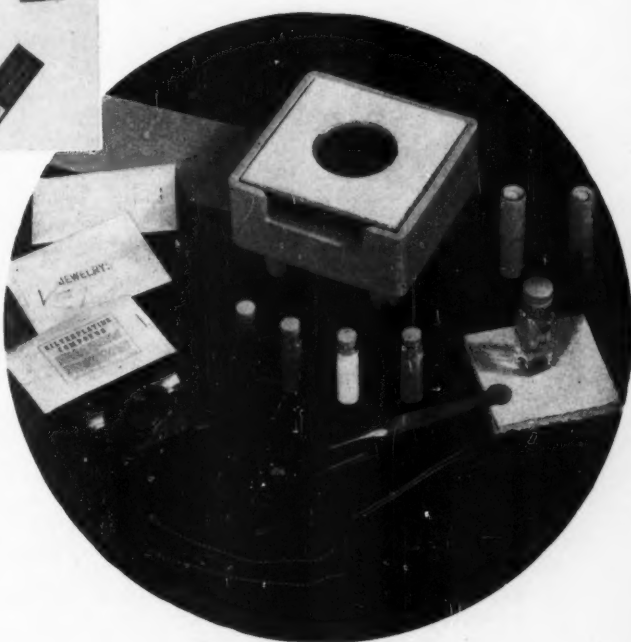
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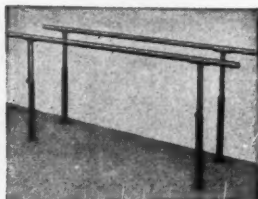
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March-April

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MEDICAL SUPERVISION IN OCCUPATIONAL THERAPY *

WALTER E. BARTON, M.D.

Superintendent of Boston State Hospital, Boston,
Mass., Associate Professor of Psychiatry,
Boston University Medical School.

A seven year old lad was taken to the hospital for a tonsillectomy the night before the operation. Greeted by a volunteer, he was allowed to give information about himself as part of the admission proceedings. He was escorted to the ward and deferred to as the important person. The ward nurse greeted him warmly. After he had changed into his own bathrobe and slippers he was introduced to the other children, and encouraged until he was participating actively in the group. He was too preoccupied with a checker game to notice the withdrawal of his parents.

Contrast this with another frightened seven year old admitted to another hospital. Almost at once after arrival he was garbed in white, put on a wheeled litter and carried off to the operating room, feeling abandoned by his parents, there to be terrified by masked, towering figures, who restrained him until he screamed himself under the anesthesia.

What does this have to do with occupational therapy? It has a great deal to do with it. Both hospitals had excellent medical staffs. The safety factors presumably were identical in both. The principal difference in the two institutions was an expression of interest in the patient as a person in the one hospital and the awareness that the attitude of patients can be recruited to speed convalescence and acceptance of hospitalization through the use of occupational and recreational activities.

The hospital as a specialized environment. There was a time when major surgery was done on the kitchen table. Babies were delivered at home, serious illnesses were cared for there and many persons died in the home. The requirements for

specialized medical care have changed all this. Medicine now requires the technical skills of many different specialists working together as a team. The hospital provides much elaborate and intricate machinery that is essential to the best results. Hospital administrators and other staff physicians have the responsibility for providing their patients with the best possible opportunity for recovery. Occupational therapy is a recognized part of good medical practice today.

The place of occupational therapy in medical treatment. It is not the intention of this paper to go into any detail about the applications of occupational therapy. They are sketched in brief.

In *pediatrics*¹, occupational therapy assists in the adjustment of the patient to the hospital routine. It also helps determine the activity tolerance of the patient. It assists in the restoration of function and, when illness is prolonged, may supplement the education. It promotes greater cooperation of the patient with the treatment process.

In *orthopedics*, occupational therapy may develop strength, increase the range of motion, promote coordination and teach the use of prosthetic appliances².

In *chronic diseases*, occupational therapy provides a meaningful use of leisure time that assists in building patient morale. It makes more tolerable the days of invalidism. It also prevents regression into dependence upon others and maintains self reliance.

In *tuberculosis*, Hudson¹ has said, "long months of treatment have combined with the disease to

*Read before the occupational therapy institute conducted by the American Hospital Association, Chicago, 1954.

unfit the patient for an abrupt resumption of the pattern of living. All functions and habits are keyed to an inactive existence." Occupational therapy helps offset this pattern by providing activities that can be carried out in bed, when the health permits. Normal patterns of interest may be maintained. Later through graded activities, as convalescence progresses, work and play may become an integral part of the patient's day.

In *cardiac disorders*, occupational therapy aids in the physical mobilization of the patient³; it holds out the promise that his life still can be useful. It encourages the transition to a new job, oftentimes a less strenuous one, by showing that new skills can be developed.

In *neurological disorders*, occupational therapy provides progressive use of the damaged part. It helps prevent deformity and restores maximal function.

In *rehabilitation of the handicapped*⁴, occupational therapy assists in the acceptance of the reality of disability. It assists the patient to learn to use the resources he has left. Activities are constructed about the events he may face in every day living. The blind, the deaf, the amputee or the paraplegic learns to overcome obstacles and acquires a proficiency in meeting them. Through occupational therapy and recreational activities, self-sufficiency is promoted⁵.

In *psychiatric disorders*, a patient "usually loses his ability to live and work happily as a part of a group of people. His manifest hostility and aggressiveness may provoke those about him to the point where they cannot tolerate his behavior.

"This is particularly true of the excited patient and those referred to as psychopaths. The regressed or withdrawn patient poses a more difficult problem. He may not be able to tolerate closeness with others; his internal anxieties, his feelings of guilt, or murderous impulses make him fearful of close contact with others. He may be threatened by psychiatrists who probe his unconscious, or nurses who intrude so closely into his life, or by the psychologist who traps him into revealing his innermost secrets. He is usually not threatened, however, by the occupational therapist. He is asked only to choose something he would like to do. Words are unnecessary. No one asks him to reveal himself. Discussion is about things rather than himself; it is possible for him to talk about the wallet he is making without invoking anxiety. In the neutral but tolerant atmosphere of the shop, through casual conversation about the task at hand, a bond of mutual trust and respect is built between patient and therapist. He finds himself and his work accepted. His sphere of interest widens to include the others who are also engaged in similar tasks and in daily life of the occupational therapy shop. The experience of social contacts in the

occupational therapy group need not be threatening, and it often becomes the bridge over which the individual moves with expanding confidence into full community living. The work at hand may provide sublimation for symptoms of disease; hostility and feelings of guilt may be dissolved in the stream of activity. It is possible to work out one's need for creativeness. In one's productive activities there is room for expression of fantasy.

"The principal goals of therapy, then, are to provide motivation along the pathway to recovery, to relieve personal anxiety, and to substitute creative activity for destructive fantasy."³

Medical responsibility for supervision in occupational therapy. It is the attending or ward physician who has the responsibility for direct supervision of each patient. In most hospitals he assigns the patient directly to occupational therapy. In some hospitals he assigns his patient to a physical medicine and rehabilitation department. In such instances, the channel of authority is from the attending physician to the physiatrist in charge of the physical medicine and rehabilitation department, to the head occupational therapist, to the occupational therapist who will actually treat the patient. The same communication channel is used for return of information about the patient to the attending physician. The physiatrist is usually found only in large general hospitals and in Veterans Administration hospitals. The physiatrist, in a physical medicine department, has the additional responsibility for the direction of his department and planning the treatment for individual patients assigned thereto.

In many hospitals the physiatrist functions as any consulting specialist. More often than not his principle concern will be with the physical problems and medical and surgical sequela rather than with the psychiatric problems. In this setting his medical responsibility includes the careful study and evaluation of the case in which consultation was requested, planning a treatment program and following the progress of the patient toward recovery. The referring physician is kept informed about the movement in therapy.

Essentials of medical supervision. Detailed knowledge about the individual patient is the point of departure for satisfactory planning of therapy. Next, the needs for treatment must be communicated to the therapist who is going to be responsible for the application of therapy. Goals must be outlined, both immediate and long range, and enough interpretation of the illness given to be a useful basis for treatment.^{6, 7} At frequent intervals the physician should visit the patient in the clinic to insure the adequacy of the determined plan. This provides an opportunity for the review of progress. Medical supervision should also in-

clude an objective evaluation of the therapeutic results. For example: the working capacity of the patient might depend upon his quickness of action, coordination of movement, strength, security, endurance and, in industrial settings, the safety of other workmen and the employability of the patient.⁸ Medical supervision includes the determination of the need to change therapy or to terminate it when the maximum results have been obtained. Follow-up is also an essential aspect of medical supervision to insure the best results.

Writing the prescription. The treatment plan is the responsibility of the attending physician or the psychiatrist in the special situations noted above. The actual assignment of the patient to occupational therapy is best accomplished by a written prescription for it makes the doctor think about the patient and the treatment he wishes the patient to have. Prescriptions may take any one of three forms.

1. A very simple form may contain identification data and a few general statements about physical or mental limitations or precautions to be observed.
2. A more elaborate form with stated objectives. The prescription of this type may describe the form of illness and list for checking certain phrases or stereotyped statements of goals.
3. A more elaborate form, most useful in psychiatric disorders, would provide a dynamic interpretation of the patient's illness and his needs and may offer suggestions, in some detail, as to the therapist's role in establishing relationships. Such information is tedious to record and is best conveyed verbally.^{3, 10}

The selection of the particular activity in which the patient will be employed is the job of the occupational therapist. She has the obligation to transmit her observations to the doctor in such a form that they are easy for him to assimilate. Prescription writing in occupational therapy can only become more specific when the function and use of the activity in occupational therapy is investigated in its relationship to the anxiety relieving mechanism. Research is also needed to develop greater understanding in the use of activity and of the trial and error procedure for developing ego skills to help a patient toward more comfortable interpersonal relationships. There must also be greater appreciation on the part of the occupational therapist of herself as a tool and an available object for interaction as the patient progresses from self concern to a wholesome interest in those about him.¹¹

Problems in cooperation. The preparation of many physicians does not fit them for an understanding of occupational or recreational therapy. Usually the activity is perceived as diversional, hence a luxury and not very essential. Doctors sometimes may not assign patients to the occupational therapy clinic, but let the therapists or nursing supervisors select patients to fill vacancies

in either the industrial or the occupational therapy program. Being unaware of the treatment potential, their instruction to "keep them busy" is the only prescription. It is difficult to interest physicians in learning more about the contribution occupational therapy can make. As a consequence it receives a very low priority in their thinking.

It has been noted that group therapy, physical therapy, a dental clinic or almost any other therapeutic assignment may take precedence over occupational therapy. Patients, as a consequence, may be scheduled for another department or may have their treatment changed without notifying the occupational therapist. This can only lead to a sense of frustration and the feeling that what the occupational therapist has to offer is not appreciated. Furthermore, physicians frequently don't visit occupational therapy clinics or treatment units or the patient assigned to industrial therapy. If they do visit, their stay is often so brief that there is no real opportunity to learn much about what goes on. Residents in psychiatry are frequently assigned as observers in group therapy. It would be good practice if they were similarly assigned to occupational therapy and would stay long enough to perceive the interaction between the group of patients and the therapist.

Nurses' contact with occupational therapy usually is on the ward; they may see it as the simple application of a few handicraft "tricks" that anybody can do. They may wonder why there should be a special uniformed corps of therapists with special preparation to perform such simple tasks. As a result of these feelings about occupational therapy, it is not uncommon to find that nurses and aides do not send or take patients to the occupational therapy clinic, that bathing and barbering schedules frequently interfere and that the nurses and aides demonstrate little interest in selling patients on the importance of occupational therapy.

Communication problems. Physicians frequently do not interpret patients' needs to the therapist clearly enough to assist her in her required duties. Physicians frequently don't supervise the patient in the manner outlined above. They may not read progress notes or provide an opportunity to discuss failures or successes in patients' progress.

Physicians occasionally tell us about occupational therapists' faults. They complain that clear statements about the progress patients have made do not reach them and that a proper evaluation of the result of therapy is not presented to them. Psychiatrists, sometimes, have found occupational therapists unable to understand the language of dynamic psychiatry. Social workers, clinical psychologists and psychiatric nurses have been better prepared to do so through graduate courses at the master's degree level with field training in psychiatric institutions. Occupational therapy schools

are moving in the direction of more thorough preparation in psychiatry for all graduates.

Today, many new groups are striving for recognition in the field of activity therapy. The adjunctive therapies include all sort of activities: music, drama, arts, education, etc. Workers in these fields have a useful technical skill, but no knowledge of hospital practices, ethical requirements, or the needs of sick patients they are called upon to serve. If these workers are included in the occupational therapy department, communication is easier. If they are organized separately, communication channels must exist directly to the physician if effective work is to be done. This complicates the problem.

Furthermore, volunteers, who are usually willing and anxious to help, often lack the skill and knowledge as to how to proceed and are also often the burden of occupational therapists. They must be supervised and trained if they are going to be productive at all. The occupational therapist must understand the objectives of the volunteer workers and distinguish them clearly from her own so that she can interpret the patients' accomplishments to the physician with sufficient clarity for him to evaluate the effectiveness of the treatment. The greater the diversification of therapy, the greater are the demands for the attention and interest of the already overburdened institutional psychiatrist or attending physician. Channels of communication that exchange information between the therapist and the physician are essential to the most effective work.

Some suggested solutions. Near the head of the list would come better preparation of occupational therapists for work in specialty fields, particularly that of psychiatry. More graduate courses should be available leading to degrees that give status. One would expect a master's degree in psychiatric occupational therapy to be available under such a program. Academic and field experience should be a required part of this training course to provide greater understanding of interpersonal relationships and the subject matter of the origins of mental disorders.¹³ Hunting¹² has said, "It would seem that the therapist need put fully as much thought and effort into how he can use himself as a tool as in what activity he will use and how he is to grade it. I do not mean to minimize the need of planning and grading activity carefully, but rather to stress the fact that for each patient worked with, there needs to be two tools, the activity and the self. Sometimes the patient's interest in an activity and his participation is the expression of the desire to please the worker. The skillful therapist with a knowledge of dynamic psychiatry approaches the patient with warmth and enthusiasm, creating a permissive setting in which the casual interchange of comments be-

tween patient and therapist can oftentimes modify the behavior."

"A willingness to know one's self, to examine one's strength and one's weaknesses, is also an essential."¹⁴ This is necessary in order that the therapist's own personality needs may not be projected upon the patient and may not become threatened by the close relationships which develop. It is not that the therapist need necessarily become a more perfect person, but that he be able to express his own special emotional wants with the security and self assurance which comes from self understanding.

Communication established. One of the ways to provide better communication is through the medium of the ward conference in which the attending physician and his participating team of therapists meet informally to discuss any problems that may arise in connection with the care and management of patients on the service. The free interchange of ideas in the unstructured group setting provides, not only for greater self realization under the tutelage and guidance of the psychiatrist, but a free exchange of information about patient problems. Occupational therapists, furthermore, should be invited and should take an active part in diagnostic and evaluation conferences where case dynamics are apt to be a subject for discussion. The same need for interchange of information between attending physician and therapist exists in the other specialties that utilize occupational therapy.

Participation in research. Another way to secure interest and understanding of physicians and to secure their supervision is to invite them to participate in research projects. Case studies, surveys of the results of therapy, and questions of importance for investigations can be developed. If the help of the physician is enlisted to assist in the experimental designs and in planning of satisfactory controls, his interest in the project will very likely be more than transitory.

What the occupational therapist really wants of medical supervision is to be assigned patients with whom he can work, and the recognition that comes from the interest of the physician in the therapeutic program. Together with this he wants an opportunity to discuss with the physician the patients' successful results or their failure to show progress. Medical supervision should function in such a way as to make this possible.

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PROPRIOCEPTIVE FACILITATION ELICITED THROUGH THE UPPER EXTREMITIES*

PART II: APPLICATION†

A. JEAN AYRES, M.A., O.T.R.

The importance of facilitation to augment muscle response is being increasingly recognized as an important form of therapy. It has probably been utilized with greater understanding in techniques which are generally considered physical therapy. A quick review of the application of proprioceptive facilitation to therapy in general will help to clarify the approach and enable better application to occupational therapy techniques.

APPLICATION TO THERAPY: GENERAL PRINCIPLES

In approaching this section it is well to review a few points brought out in the first part. The patients for whom proprioceptive facilitation is most applicable are those whose muscles are not receiving sufficient motor impulses. This might be due to destruction or irritation of the anterior horn cells or to interference with the central centers or pathways which normally carry impulses to them. A stimulus will cause some of the anterior horn cells to fire, but those which are excited subliminally will not fire. In order to get these subliminally excited or dormant neurons to fire, there must be a summation of the subthreshold stimulation. This can be accomplished by proprioceptive facilitation achieved in one or more ways. When summation does occur, more motor units respond, thus increasing voluntary motion. It has been found by Kabat that when facilitation occurs, muscles with a grade of "O" (due to upper motor neuron lesions) give a definite response and partially paralyzed muscles give an increased response.²⁵

Contactual stimulation. Knott reports that in giving manual physical therapy it is helpful to give proprioceptive stimulation by applying pressure to the surface toward which the motion is desired. For example, pressure should be applied to the dorsum of the hand when extension of the wrist and fingers is being encouraged. The pressure should stimulate deep proprioceptors without causing pain. For elbow flexion, the pressure should be applied to the flexor side of the forearm instead of letting the finger tips press into the extensor surface.²⁶

Stretch. In the treatment of patients, Kabat has found that a rapid stretch is particularly effective in producing facilitation in muscles which are flaccid. He has also found that stretching another muscle which is part of the same movement pattern can also facilitate.²⁵ This is in complete

accord with some of the electromyographic studies reported in Part I. However, Kabat also reports that stretching an antagonist may, in some instances, stimulate a better response in the agonist at the same time. The voluntary contraction of the muscle against resistance is usually greater in the shortened range than in the lengthened range.²⁵

A somewhat different approach to stretching is the application of traction to a joint while other techniques are performed.²⁵ Traction is particularly effective as facilitation to flexion, while compression will facilitate extension or co-contraction.

Resistance. A well-known proponent of resistance is DeLorme. He applied maximal resistance to simple movement, usually through the use of weights and pulleys. As seen in the studies on resistance cited in Part I, when the muscle contracts against resistance the latter causes a barrage of proprioceptive impulses which in turn effect the frequency with which the lower motor neurons fire. The stretch which the resistance causes is thus advantageous.^{5, 6}

Resistance is also applied manually, usually by the physical therapist, in the treatment advocated by Huddleston, Newman and Kabat. Huddleston states that heavy resistance is used to bring about maximal reinforcement of muscular contraction through increased synaptic facilitation. The resistance is applied not only to local bodily segments but to other regions of the body in order to recruit the greatest number of proprioceptive impulses, thus achieving maximal facilitation and reinforcement of muscular response.²¹ This is use of resistance to utilize summation and irradiation from proprioceptive stimulation due to increased tension in the muscle.

Kabat feels that resistance is a more powerful facilitation method than is passive stretch. Electromyographic studies on some of his patients showed that a large proportion of the motor units responded only after the application of resistance.²⁵ This has also been the experience of the writer.

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†This is the second part of a three-installment article. The next section will appear in the May-June issue, 1955. Part I appeared in the January-February, 1955, issue.

Resistance is not only a facilitatory mechanism, but is necessary in order to activate a maximal number of motor units.

Patterns of muscle action. Experimentally, one isolated mechanism can be studied at a time. When therapy is considered, it is the end result in the patient that is important and not the individual mechanism. In the use of resistance in therapy, stretch could not be ignored. Even better therapeutic results are obtained by combining resistance, stretch and patterns of muscle action. Kabat refers to patterns of muscle action as mass movement patterns and points out that voluntary response of a paralyzed muscle can be facilitated through the performance of a mass movement pattern of an entire extremity against resistance.²⁵ Kabat has found that most of these patterns are of a diagonal, spiral type. Diagonal patterns can be observed in normal activities such as chopping wood and in many sports activities.²⁸

It appears that the treatment technique known as confusion motion⁵² is also the use of resistance to a motion pattern. Both confusion motion and patterns of muscle action appear to be based on irradiation. The term *combined motion*—the contraction of more than one group of muscles⁵²—and Kabat's term, *mass patterns*, are apparently synonymous.

Kabat has observed that in many patients with severe paralysis, mass movement patterns were undisturbed. A disruption of patterns was found only in those with athetosis.²⁵ This is understandable in the light of Gellhorn and Johnson's experiment¹⁷ in which they concluded that the response to stimulation of the motor cortex follows a synergic pattern rather than a single muscle or motion. The theory that all the muscles responding synergically are under a common governing force is confirmed by measuring the frequency of discharge of paretic muscles and of their normal synergists when activated at the same time. The similarity of frequency of discharge indicated that it is related to the cortical excitatory process.¹⁵

Temple Fay has used patterns of muscle action, particularly the locomotion patterns, and has applied them as an aid to rehabilitation.⁹ With the exception of crawling, the locomotion patterns are more applicable to lower than to upper extremities.

It is interesting to note that a group of physicians in Israel, unaware of the work of American doctors, came to a similar conclusion. They decided that movements were associated and that a given motion could be elicited if done in connection with other motions but could not be elicited alone. For example, abduction of the shoulder alone was impossible, but it could be obtained when combined with shoulder flexion, elbow flexion and forearm pronation. They used these associated movements in muscle reeducation.¹⁸

Gellhorn has suggested the use of patterns of muscle action to assure sufficient impulses to a paralyzed muscle to prevent atrophy. Here again another muscle group with relatively normal innervation would be used in either isometric or isotonic contraction to facilitate the response in a paralyzed muscle.¹⁴

Reversal of antagonists. It will be recalled from Part I that this neurophysiological mechanism is based on successive induction. It is usually combined with mass movements. Here, again, there is a combination of facilitation mechanisms. Before considering the application of reversal of antagonists it is helpful to recognize it in normal work and sport activities. Essentially, the mechanism involves the antagonistic motion just preceding the main action. For example, pitching a baseball, chopping wood, swinging a golf club or kicking a football all involve antagonistic contraction against resistance immediately preceding the agonistic motion also against resistance. The stronger the contraction of the antagonist, the greater is the facilitation of the agonist.²⁵ The resistance comes from gravity and inertia. It will be noticed that when a person puts extra force into an action, the antagonistic action occurs more quickly than if only moderate force is used.

Only Kabat and his associates have reported the use of reversal of antagonists in therapy. They state that it is particularly effective if the agonist is paralyzed and the antagonist is relatively uninvolved. Heavy resistance is used throughout both ranges. Since the complete range is utilized, further proprioception is derived from stretch at the moment of reversal as well as from the reversal of antagonists and resistance.²⁵ Electromyographic studies on patients support this assumption.²⁹

Facilitation through the cerebellum. It was pointed out in Part I that stimulation of the cerebellum facilitated motor movements and that apparently this facilitation can be bilateral. It may be associated with successive induction.

Kabat classifies the use of a cerebellar mechanism as "rhythmic stabilization" and considers it a type of reversal of antagonists. The technique is one of rapid alteration of isometric contraction (contraction without movement) of antagonists against maximal resistance. While the patient attempts to fix a joint in a rigid position, the therapist gives maximal resistance, first in one direction, then in the opposite. As the patient alternates contraction, the power of the muscles increase. This is then followed by a regular isotonic contraction throughout the range.²⁵ That this is a cerebellar technique is indicated by the fact that it is successful only where there is no cerebellar involvement.²⁵ Application of cere-

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BIOPHYSICAL PRINCIPLES IN SELECTION OF HAND SPLINTS

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The bracing of a disabled hand is not only a mechanical but a physiological problem and necessitates an understanding of the operation of the hand as a functional unit. Therefore, before prescribing, fitting or training the patient in the use of a brace, the normal kinesiology should be well understood. This requires the study of the normal hand not only under conditions of rest but, and this is far more important, under conditions of functional activities. Unfortunately only very few schools stress this need.

When studying the normal motion of the hand, it is necessary to note the characteristics relating to the temporal and spatial pattern of activity, observing the angular changes at various joints and the position of the component parts of the hand during activity. The pattern of activity, such as opposition which permits the hand to grip, should be studied in successive steps of co-ordinated action at successive locations along the path of progression of the activity. Such studies should not include only pinch, grasp or hook, which are the three basic activities of the hand, but should include more complicated patterns of every day activities and industrial or vocational working habits. It is apparent that most of the activities of daily living, as eating, writing, buttoning a button, etc., are performed on or close to the body, whereas vocational tasks require actions away from the body. The activities of daily living require considerable flexibility in comparison to industrial work patterns.

The next requirement before prescribing braces is the necessity of possessing a thorough knowledge of the common types of disabling conditions which affect the hand. These conditions result in one or a combination of the following deficiencies: (1) loss of elasticity; (2) loss or imbalance of muscular power; (3) skeletal malalignment. Each of these deficiencies has its own peculiar set of factors which have to be considered in detail before a brace is selected.

LOSS OF ELASTICITY

Loss of elasticity of the hand is caused by tightness or contracture of tendons, fascia or ligaments, and produces in the hand a position of non-function. Loss of elasticity may follow severe crushing injuries or multiple fractures of hand. In such conditions, the digits cannot oppose one another. The wrist is usually flexed and the hand is pronated. The metacarpophalangeal joints are ex-

tended or hyperextended, the transverse arches of the hand are flattened or reversed and the thumb is at the side and displaced backwards. The interphalangeal joints are either straight or flexed into a claw position. If there is motion present it is useless because the digits cannot oppose each other effectively.

Loss of elasticity in the hand also may be caused by other divergent conditions. It may follow inflammatory conditions such as wounds, infections or burns. This usually leads to severe flexion contractures characterized by flexed wrist and digits. The main factors which lead to loss of elasticity of the hand are edema, lack of mobility, and assumption of faulty non-functional position. To preserve elasticity of the various elements, the hand should be moved, actively if possible even when swollen, several times a day. Swelling can be avoided by elevation and pressure dressing. As much of the hand as possible should be exercised, and as early as possible.

From the viewpoint of physical medicine the problem involves the mobilization of already established contractures and deformities. If these contractures are not of too long standing they yield to treatment by stretching, positioning and splinting.

A splint should be selected so that as nearly as possible it restores to the hand the position of function (the wrist balanced at 20 to 30 degrees of dorsi-flexion and the metacarpo-phalangeal joints slightly flexed). The hand should never be placed straight. The splint should have constant elastic pressure or tension, which bears on the joint capsules, tight periarticular tissues and contracted muscles and ligaments. To accomplish this, the splint must follow the three point pressure system of bracing: the two stabilizing points at the ends of the lever arms of the brace, and the active force under the joint to be moved. These areas of pressure should be spread over as broad a surface as possible. Such splints should be light and should be worn the greater part of the day and night. They should be removed only for active treatment. If the splints have any hinges, these should correspond to the natural axis of the joint, when placed transversely. If the hinges are used along the bones, then they should be placed parallel to the long axis of the bone.

The splints should be selected not only to meet the basic needs, but should correct all disabilities

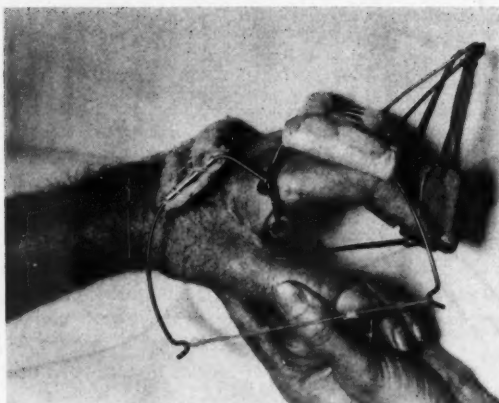


Figure 1. Knuckle Bender Splint with Finger Supports.

present. Figure 1 illustrates an excellent splint for mobilization of the metacarpo-phalangeal joint. It is called the "knuckle bender" splint. It has two bands which go on the dorsal aspect of the hand and another piece on the palmar surface. The points of pressure are exerted by the bands over the backs of the distal ends of the proximal phalanges and the backs of the bases of the metacarpal bones; the counterpressure force is formed by the fusiform rod on palmar surface which is placed on the heads of the metacarpal bones. This splint will pull through from the straight position of the metacarpo-phalangeal joints to the complete flexed position. However if there is also involvement of the thumb or fingers, this splint has to be modified to correct this disability. Figure 2 shows another elastic splint, the main aim of which is to correct flexion deformities of the fingers. In certain cases this splint may be satisfactory, but as shown, it permits the palmar surface of the hand to remain flat. Under such conditions, the selection of the splint was unsatisfactory as the splint did not correct all disabilities. It is important to remember that every splint should restore the normal transverse metacarpal arch to the hand.

LOSS OF MUSCULAR POWER

Loss of muscular power results in loss of co-ordinated active motion. It is usually due to some neuromuscular disorder such as poliomyelitis, hemiplegia, peripheral nerve injury, etc. It may follow direct trauma to muscles, tendons or blood vessels. Secondary changes may cause atrophy, fibrosis and stiffening in non-functional position.

A normal hand exhibits a precise balance between the long flexors, long extensors and the intrinsic muscles. There is also reciprocal balance and synergistic action between various joints and the muscles that move them. The hand so poised is said to be in the position of function. This

means that the wrist is dorsiflexed 20 to 30 degrees, all the joints of the fingers are in moderate flexion and the thumb is in moderate opposition. The metacarpal bones form an arch. This position of function is maintained primarily by two key joints, the wrist for the hand and the metacarpo-phalangeal joints for the fingers.

In the majority of cases the key position of the wrist is necessary to permit adequate action of fingers. With the wrist in flexion, finger flexion is weak because of the tension of the extensor

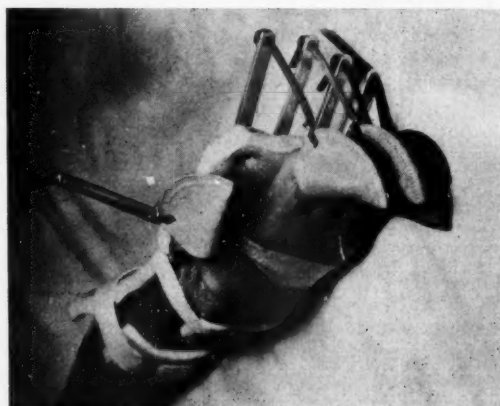


Figure 2. Elastic splint showing undesirable position of wrist and palmar arch.

tendons. Even in the normal hand a full fist cannot be made or strong flexion cannot be exerted with the wrist acutely flexed. With the wrist in the key position, strong flexion of the digits is possible since the extensor tendons are relaxed and shortened. However, in permanent disabilities around the wrist it is imperative to select the position of the wrist individually so that the greatest amount of activities are permissible. It is obvious that with the hand in the so-called position of function, especially if associated with disabilities of pronation and supination or of the elbow and shoulder, small objects, like pencils, cannot be picked up easily. In such cases the mechanical advantage of position of function may have to be sacrificed for functional performance, and the wrist may have to be placed in lesser degree of dorsiflexion.

The key position of metacarpo-phalangeal joints is slight flexion. This position is necessary in extensor muscle paralysis or weakness to permit the interphalangeal joints to extend actively if the intrinsic muscles are functioning. The extension is not strong, but can be carried out against gravity. It is sufficient to permit functional activities in a co-ordinate manner. It is obvious that almost all functions of the hand requires strong flexion of fingers. Extension is used only to open the grip and therefore the extensor muscles do not need more strength than to act against gravity. The

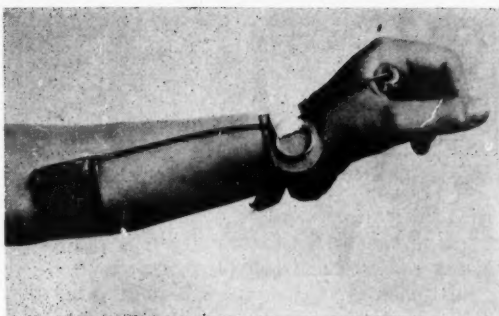


Figure 3. Oppenheimer Splint for Wrist

position of slight flexion of metacarpo-phalangeal joint is obtained by using a lumbrical bar.

The basic principles underlying the use of splints in conditions showing loss of muscular power is to protect the weakened muscles and provide assistance to these muscles so that a coordinated movement is obtained. In addition, such splints should prevent or correct tightness and contractures.

Protection of the weakened muscles is the most important single criterion in treatment of early disabilities of hand showing loss of muscular power. Prolonged overstretching of weak muscles

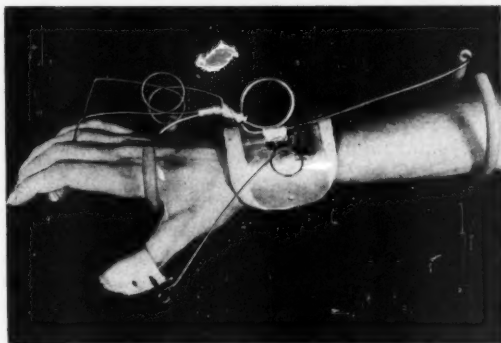


Figure 4. Thomas Hand Splint

leads to persistent deformities which are very resistant to correction. Prevention is simple and easily accomplished. When there is weakness and imbalance of muscle groups, proper apparatus helps to minimize this effect. Apparatus should be used early. Weakened muscles usually require some assistance to accomplish their part in a coordinate motion. Re-inforcement of the action of weak muscles by appropriate springs or elastics tends to promote increase in strength of these muscles. (Fig. 3.) Otherwise the weak muscles, being unable to oppose the stronger pull of their antagonists, assume the position of least resistance, which places the hand in a position of non-function. The springs or elastics used should be only of the strength equal to that of the difference between remaining muscle power and the former tone of the muscles now weakened or paralyzed. (Fig.

4.) These assists should act on the joints that are activated by the involved muscles, and should pull in the same longitudinal axis. (Fig. 5.) Springs or elastics exerting pull at right angle tend to act as resistance to the already strong muscles and delay the development of muscular balance. If contractures or tightness have developed, then it will be necessary first to restore the mobility of the joints.

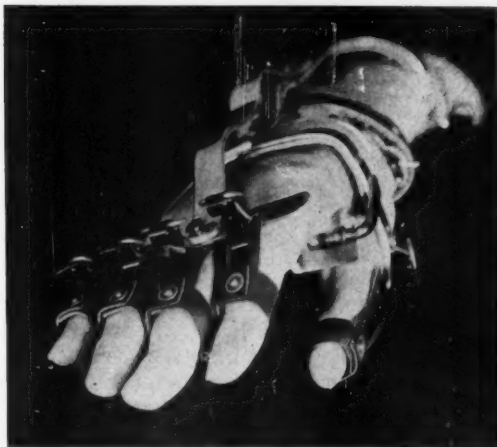


Figure 5. Hand splint with lumbrical bar and Hunter springs to fingers and thumb.

SKELETAL MALALIGNMENT

Skeletal malalignment. This condition often follows fractures or dislocations of the digits and to some extent of the metacarpal bones. Here the normal mechanics of tendon and muscle action are interfered by angulation and the normal functional balance of the hand is lost. Certain muscles act at disadvantage which increases the disability.

This condition may be corrected by splints which provide sufficient traction to correct the malalignment yet avoid distraction of the fragments. If this is not provided malunion or nonunion occurs. Splints should correct not only the longitudinal displacement but also the rotary deviations, and should place the digits in such a position that the plane of motion of the fingers passes through the navicular tubercle. Motion of the adjacent non affected joints should be encouraged.

CONCLUSION

It is obvious that most disabilities of the hand combine more than one deficiency. Therefore splints for hands have to be modified to meet the needs of each individual case. They should be used only as long as needed, and they should be changed as the condition improves. This is particularly important when using springs or elastics in correcting the loss of muscle power. Milder tension should be used if strength of the muscles returns. Great care always should be exercised



Figure 6. Basic Opponens Splint with a Hinge

in selecting splints so that proper postural and muscular balance is obtained with the necessary range of motion. When stiffness or contracture is so severe that it requires too great tension by active splints—that is, there is exerted a too strong pull by springs or elastics—then a static splint should be used which exerts and maintains a steady pressure on the involved joints. Such splints must be worn over prolonged periods of time. An example of such a splint (Fig. 6) is the simple or basic opponens splint which exerts pressure on the metacarpo-phalangeal joint of the thumb, by the radial bar, and the dowel for the web space. This static splint becomes partially dynamic by addition of a hinge on the proximal bar on the radial side which is activated by an elastic. It is obvious that close supervision is necessary in the use of all these splints to prevent substitution of movement and developing faulty patterns of motion. Frequent examinations are necessary to ascertain their efficiency.

In cases with bilateral involvement of hands, as it occurs in poliomyelitis, the primary emphasis should be placed on providing splints that would enable the individual to perform activities of daily living. Industrial activities are of secondary importance. If the patient has severe involvement he may have to use splints indefinitely or permanently. In such cases it is important to provide him with an apparatus with which he may accomplish the greatest number of activities. This means that great care has to be exercised in providing the proper grip. Of the three basic hand holds, the pinch is most universal in application and in use in daily activities. There are three fundamental pinches, the so-called finger tip prehension, the lateral or sidewise prehension and the palmar prehension. The finger tip grip or prehension (Fig. 7) shows strongly arched fingers.

This type of grip is used in picking up pins and other small objects, but it is unstable in holding medium size objects most commonly used in daily life.



Figure 7. Finger tip prehension.

The lateral or sidewise prehension (Fig. 8) is accomplished by the thumb clamping against the side of the proximal interphalangeal joint, or the medial phalanx. This type is used for quick gripping and is rather insecure. The possible range of motion is limited. It is good for certain specific function, but is not very versatile.

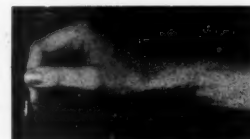


Figure 8. Lateral prehension.

The preferred grip is the palmar prehension (Fig. 9) which provides a greater gripping surface because it uses the palmar pads of the thumb and the two adjacent digits, the index and middle fingers. It gives a secure grip. In this grip the thumb is fairly straight and the fingers show a gentle flexion. It has a wide range of finger motion to take care of different sizes of objects. With this grip an object like a pencil can be held at the fingers and can be supported all the way up against the side of the hand and braced at the knuckles. With palmar prehension, it is possible to get a wide opening without moving the thumb. The palmar prehension principle has been used in the "functional hand assist" developed at Gonzales Warm Springs Foundation. In this device, for completely flail hand, the thumb is stabilized and the fingers are activated by a spring and a cable. The cable transmits the motive force, in a manner similar to that used in upper extremity prosthesis, from either shoulder or lower extremity. With this device the patient, who otherwise may be completely disabled, gains a certain amount of independence because he can perform a number of activities like eating, writing, brushing teeth, etc.



Figure 9. Palmar prehension.

It is obvious that hand splints, especially in a patient with permanent disability, must provide the optimal position for grip which a given individual may have. This depends not only on the remaining muscle power and functional ability of the patient, but on the possibility of vocational rehabilitation. The position of grip provided by the brace should be one that will allow the in-

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THE ROLE OF THE OCCUPATIONAL THERAPIST IN THE REEDUCATION OF APHASIA PATIENTS¹

PART III

MYRA McDANIEL, Major, WMSC

SUPPORTIVE PROGRAM

In a supportive type of program for the aphasic individual, the therapist should utilize and reinforce to the utmost the reeducative training that the aphasic individual is receiving from speech therapists or educational personnel. Again the section has been divided into treatment for the receptive and expressive disorders. The basic difference between the two types, although rarely are they so specifically isolated, is that the world cannot communicate with the receptive aphasic and the expressive aphasic cannot communicate with the world.

The aphasic's initial treatment appointment in occupational therapy should be carefully planned so that the therapist has an uninterrupted period to spend with the individual. If at all possible, the therapist should know the speech problems of the aphasic before his initial treatment.

The physical condition of the aphasic together with the treatment prescribed by the physician will, in many instances, determine the initial project of the aphasic. If a choice of projects is to be made by the aphasic, the project possibilities should be presented singly so that the individual has time for consideration of each. The therapist must keep in mind at all times that new people and new situations add to the frustration of the aphasic.

The aphasic individual works best in an unhurried atmosphere. The work area should be neat and orderly. The arrangement of tools and materials should be the same from day to day, as the aphasic has a reduced ability to adjust to new situations. The term, spatial rigidity, is used to describe the symptoms of the aphasic who is overly sensitive to rearrangements and disorder and who cannot work until everything is in its place. It has been observed that the aphasic who is flexible in his work habits usually has a good prognosis for speech reeducation.

RECEPTIVE DISORDERS

Receptive disorders usually manifest themselves in an inability to recognize or comprehend written or spoken material. Some reinforcement of the reeducation program that the occupational therapist can do with the receptive disordered aphasic is achieved through the naming process. The most important contribution she can make, however, is to aid this individual psychologically and to pro-

vide constructive activity at an adult level commensurate with the individual's ability.

Occasionally an aphasic is found to have tactile agnosia (astereognosis). If both the auditory and visual pathways are affected, this is a serious problem. However since both are rarely impaired at the same time, these remaining auditory or visual senses can be used to augment the lack of tactile perception.

The occupational therapist must be aware of the limitations of the receptive aphasic whether they be auditory or visual. The quality of the individual's comprehension of oral or written instruction should be known by the therapist. This information can readily be obtained from the speech department. Many aphasic individuals guess at a question rather than admit their lack of comprehension. Frustration must be kept to a minimum and the more information that the occupational therapist has about the aphasic, the more adequate can be the treatment program. Success in the achievement of a finished project is of paramount psychological importance to the aphasic and projects must be directed toward the level of his possible accomplishment.

The first project should be one requiring a short period of time for completion and one in which the patient is assured of success. A situation should not be created in which the patient feels that he has failed. Effective teaching methods include demonstration, oral instruction, written instruction and, if necessary, kinesthetic instruction.

An aphasic with a visual number agnosia would be unable to weave a complicated pattern that necessitated the use of a multichanging numbered draft. This same individual would be able to weave a simple over and under pattern on a loom whose treadles could be differentiated by color. A simple draft could be followed if the numbers were written in the color of the thread to be used. After recognition of digits has been achieved, pattern weaving could be introduced and successfully done.

This same aphasic individual would be unable to use a ruler for construction of projects. Patterns should be provided so that the individual need only trace the outline and not measure the required inches or feet.

¹This is the third part of a three-installment article. The first two installments appeared in the previous two issues of the Journal.

An aphasic with an auditory verbal agnosia cannot comprehend directions given orally. Instructions to this individual can be done in writing or by demonstration. It might be beneficial to use the simplified step by step illustrated procedures for leather work, stenciling, simple woodworking or ceramics. However the therapist should keep foremost in mind that the aphasic individual needs the psychological support of the therapist in his program more than work of an isolated independent nature. The individual's frustration level must be uppermost in the therapist's thinking as the program is developed.

The auditory verbal agnosia's conversation may be inappropriate, as this individual may have no perception of word sounds, even his own. Tact, patience, understanding and intuitiveness will aid the therapist in preventing frustration in this individual.

EXPRESSIVE DISORDERS

The expressive disorders are characterized by the inability of the aphasic to express thoughts or actions through writing or speaking. The expressive individual understands both written and verbal instruction and makes use of direct instruction intelligently and meaningfully. Instruction should, nevertheless, be given in a concise, clear manner and adapted to the patient's level of understanding.

The supportive program for the nonverbal apractic would follow closely the program outlined in the reeducation section. For the kinetic apractic, the purpose is to restore functional grasp. The treatment would progress according to accepted occupational therapy procedures for treatment of muscle weakness. Treatment for the ideokinetic apractic, in which there is no coordination of intact idea and motor pathways, would involve single and repetitious activity limited to one phase at a time. Close observation of the aphasic's ability to follow additional instruction could be the only criterion in progression of treatment.

Supportive treatment for the verbal apractics and aphasics is directed not only toward reinforcement of speech reeducation but also toward the training to full usefulness of the nonaffected extremity and the over-all personal adjustment of the aphasic.

The occupational therapist should speak slowly and enunciate clearly when talking to an aphasic individual. If the individual has difficulty finding a word, the therapist should be cognizant of this and not supply the word immediately. Groping for correct words is not peculiar to just the aphasic, many individuals hesitate in their search for words during a concentrated conversation. The aphasic will recognize the correct word if it is offered to him, but he should be given sufficient time in which to formulate his answer, if possible. The conversation should be on an adult level even

though the aphasic's response seems immature. Unless the therapist has time to give his undivided attention to the patient he should not engage him in conversation. A brief "hello" as the therapist goes through the clinic is better than a direct question which the patient feels obligated to answer and which requires time and effort for him to formulate.

Close contact should be maintained with the speech department so that current information can be obtained regarding the speech progress of the aphasic. As a word is acquired it should be used. The individual should be discouraged from the use of gestures or head noddings if a word has been learned that is appropriate in place of the action. The word should be written and printed for the individual to read if this proves necessary. The individual should not, of course, be forced to speak. Suggestions from the speech therapist should govern the occupational therapist's procedure. Spontaneous speech may come as the individual adapts to the clinic situation.

The aphasic individual should be given the name of the object which is being made. This naming should be done verbally and written both in script and in print. The names of tools and materials should be included gradually. The simpler the terminology and the more it relates to experiences the individual has had in the past, the better will be the association. *Cotton* or *yarn* is a better choice of words than *warp*. *Leather* as a term is preferred to *tooling calfskin*. *File* is preferred to *second cut* or *smoothing* types. The aphasic will recognize the tool he needs after working on a project and sometimes will furnish the name if stimulated to do so. Thus an individual needing a hammer might supply the name if presented with a sentence, "You pound nails with a ———." No aphasic responds exactly like another to the same stimulus. The therapist must be alert and resourceful in utilizing the speech the individual is acquiring.

SUMMARY

The occupational therapy programs have been proposed for two specific situations: (1) the reeducation program for the occupational therapist who is working with aphasic patients in a situation where there is no personnel available to do speech retraining, and (2) the supportive program in which speech is taught by speech personnel and the occupational therapist utilizes and reinforces the speech of the aphasic in the occupational therapy treatment period.

For every disease entity in current medical practice there seems to be a specialist to treat it. So it is with aphasia. The speech therapist is ideally prepared to retrain the aphasic individual. Unfortunately there are not always speech therapists where there are aphasics. It is for this reason that

(Continued on page 77)

THE BLOCK PRINTING PRESS

An Apparatus for the Treatment of Radial Nerve Injuries

LOTTIE V. BLANTON, Captain, WMSC

The block printing press featured here was developed in the occupational therapy clinic, Brooke Army Hospital, in the summer of 1951. It has been successfully used for the treatment of radial nerve injuries against gravity and graded resistance when the lesion is distal to the innervation of the triceps brachii.

The sequence of operation of the block printing press is as follows:

- A. Roll ink over the block with a brayer.
- B. Place paper on the printing bed.
- C. Lower the block until it is in its resting position.
- D. Raise block from the resting position (to almost a vertical position).
- E. Remove print.
- F. Repeat process.

The extensors of the wrist are exercised each time the block is lifted (eccentric contraction) and each time the block is lowered slowly (concentric contraction). The finger extensors are not exercised unless the leather strap rests over the phalanges.

The following technical observations have been made:

- A. The quality of the print depends upon:
 1. The grade of the linoleum and the surface of the block.
 2. The accuracy with which the block is cut.
 3. The evenness with which the ink is spread on the block.
 4. Adequate padding on the printing bed of the press.
 5. The absorbency of the paper used for the print.
 6. The skill with which the block is lowered onto the paper.

B. The quality of the print does *not* seem to vary with the amount of pressure applied, if the above named features are adequate. Nor does the quality seem to vary with the amount of resistance added for therapeutic purposes.

Note the attached photographs and the graphic drawings of the different views of the block printing press.

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Figure 1. The position at rest and when the print is being made.



Figure 2. Contraction of the wrist extensors: lifting the block.



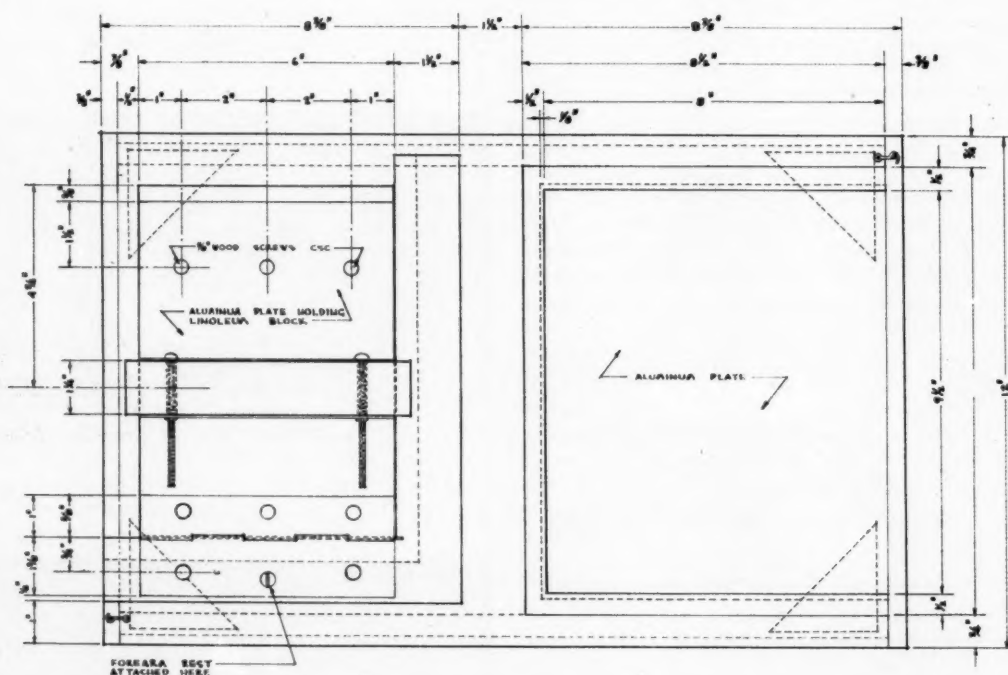
Figure 3. Adding resistance to the apparatus.



Figure 4. The occupational therapist testing the extensor carpi radialis.



Figure 5. Contraction of the wrist extensors and the finger extensors. (Note the leather strap rests over the phalanges.)



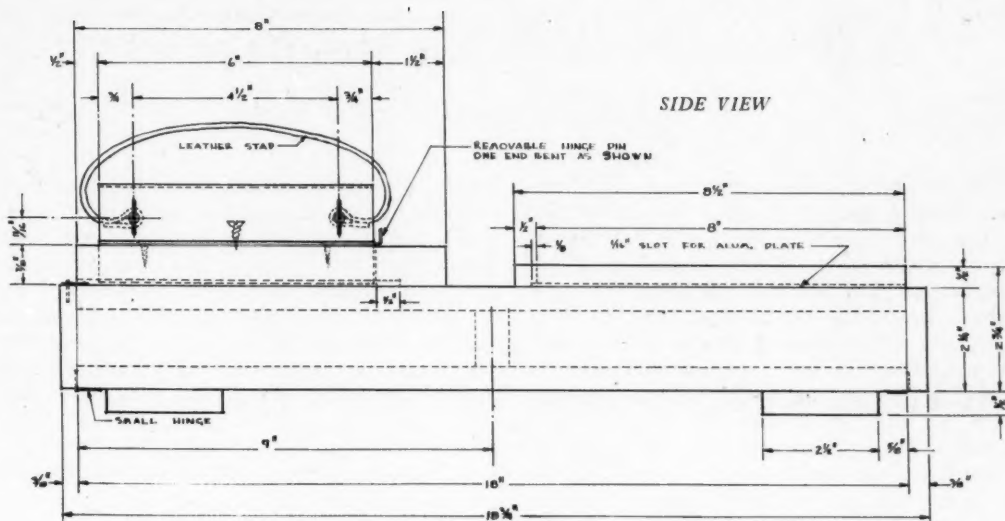
TOP VIEW

The following features can be seen from the graphic drawings of the top view:

1. The linoleum block which is attached in position by screws through the piano hinge and the aluminum plate. Blocks may be easily changed by removing these screws and replacing them in another block after it is put in place on the press.
2. The screws for attaching the forearm rest.
3. The aluminum plate at the right of the drawing. This is the ink plate. It is removable from the frame so that it may be cleaned easily.

2. The screws for attaching the forearm rest.

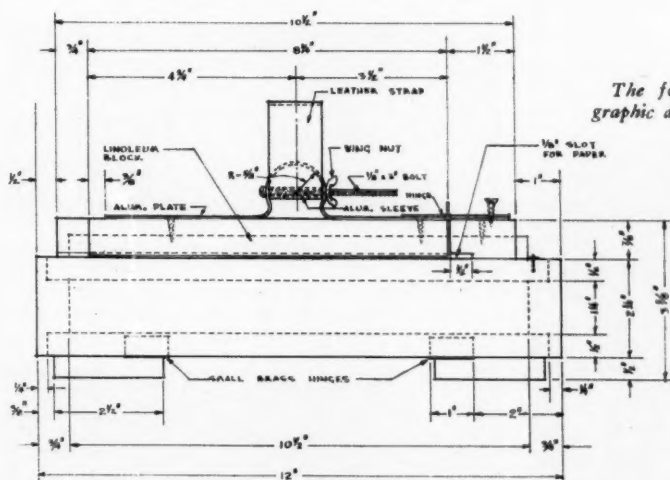
3. The aluminum plate at the right of the drawing. This is the ink plate. It is removable from the frame so that it may be cleaned easily.



SIDE VIEW

The following features can be seen from the graphic drawing of the side view:

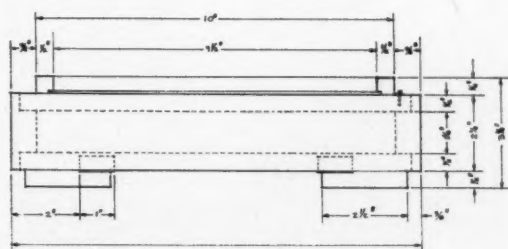
1. The 2 1/2-inch base or foundation for the block printing press. This is a compartment which opens by a drop door at the left end of the apparatus. Here the paper, mats, ink, etc. are stored.
2. The attachment of the leather strap.



LEFT END

The following features can be seen from the graphic drawing of the view of the left end:

1. The aluminum plate with the transverse metacarpal support.
2. The screws with the wing-nuts through the support. It is here that resistance is applied. Printers leads and slugs, cut the length of the support and notched for the screws, serve adequately for resistance.



RIGHT END

Printing Block Not Shown



FOREARM REST

This plastic forearm rest (it may also be made of metal) is curved to fit the forearm. It must be angled at the screw-end to rest on the apparatus at its point of attachment and then decline to the table level. (See Figure 5).

A SELF-CARE BOARD FOR HEMIPLEGICS

MARVIN G. LEPLEY, O.T.R.

We have found the self-care board to be inexpensive, easily constructed and of practical use for the hemiplegic or any person having function of only one upper extremity. The original board was made of $\frac{1}{2}$ " pine. The board is intended for use in the bathroom but may be placed wherever it is found most convenient and useable. The devices incorporated on the board are intended to assist the user in opening and closing bottles of various shapes and sizes, in cleaning the eye glasses, in cleaning and filing the finger nails, particularly on the unaffected side, and in general, to hold hygiene necessities such as the toothbrush, toothpaste, comb, razor and shaving cream as they are used. The board is most effectively placed beneath the medicine cabinet because of the need for a mirror, however a mirror could be included on the board.

Consideration should be given to the side of involvement. As an example the eye glasses holder should be placed on the left side if there is involvement of the right side.

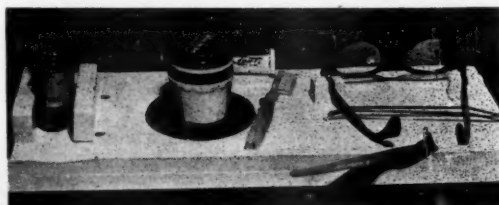
On the left side of the board is a small adjustable vise of wood which serves to assist in

holding rectangular bottles or a toothpaste tube while the cap is screwed on or off. The $\frac{1}{4}$ " foam rubber pad is cemented to the board and holds round-shaped bottles such as cold cream jars while the cap is removed or replaced. The bows of the eye glasses are lined up in small wooden cleats with the lenses toward the back of the board, the rubber band is then pulled across the bows and hooked over the $\frac{1}{4}$ " dowel. This holds the glasses securely while being cleaned. The $\frac{3}{16}$ " stove bolt and wing nut hold a finger nail file or emery board in place. These must have a hole drilled through to fit over the stove bolt. The person using the board is thus able to clean and file his nails on the unaffected hand. A shallow ledge is installed at the front of the board to prevent bottles or articles from sliding off.

The working drawing and pictures should be helpful if anyone desires to make such a board.



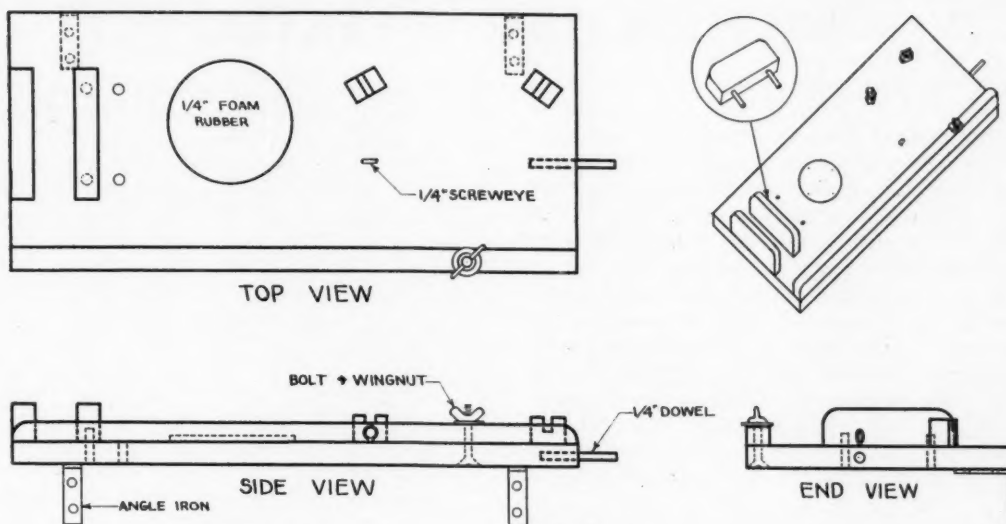
Showing use of bottle opening device at widest setting and relation of devices to one another.



Illustrating from left to right the adjustable vise for opening and closing bottles, the rubber disc for round shaped bottles, the cleats and rubber band holding spectacles for cleaning, and the nail file or emery board which can be adjusted to any position.



Details showing the use of the bolt and wing nut holding emery board, and spectacles being held by cleats and rubber band. Note that cleats elevate lenses from board for easier, complete cleaning.



DRAWINGS OF
A SELF-CARE BOARD
FOR
HEMIPLEGICS

Materials:

- $\frac{1}{2}$ " stock throughout
- 1, $\frac{1}{4}$ " dia. screw eye
- 1, $\frac{1}{4}$ " dowel, 2" long
- 1, $1\frac{1}{2}$ " flathead stove bolt and wing nut, $\frac{3}{16}$ " No. 2
- 2, $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $\frac{1}{2}$ " angle irons

NFIP FELLOWSHIP

The National Foundation for Infantile Paralysis announces the availability of a limited number of fellowships in the field of occupational therapy teaching. These fellowships, which may be approved for one to three years, are made available to help prepare properly qualified candidates as instructors and administrators in occupational therapy schools.

These fellowships are awarded as a part of the National Foundation's program of professional education for which \$22,700,000 in March of Dimes funds have been appropriated since 1938 through 1954.

Applicants for fellowships must be U. S. citizens (or applicants for citizenship). Eligibility requirements also include: sound health; a baccalaureate degree; membership in or registration by the American Occupational Therapy Association; and significant satisfactory general experience as an occupational therapist, preferably for three years or more.

Each candidate must propose a program which will include basic academic and clinical study, specialized training in one or more fields of occupational therapy, and supervised experience in teaching and school administration.

Financial benefits are based on the individual need of each applicant and may include tuition, books, travel expenditures incidental to the program, and maintenance.

Applications may be submitted at any time during the year but must be submitted by March 1 for consideration in May; by September 1 for consideration in November; and by December 1 for consideration in February.

For further information and application forms write The National Foundation for Infantile Paralysis, Division of Professional Education, 120 Broadway, New York 5, N. Y.

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Georgia Warm Springs Foundation

GRADUATE COURSE

Physical Therapy and Occupational Therapy In the Care of Poliomyelitis

This course is open to graduates of approved schools of physical and occupational therapy. Such graduates must be members of the American Physical Therapy Association and/or American Registry of Physical Therapists, or American Occupational Therapy Association.

Entrance date: First Monday in January, April and October.

Course I—Emphasis on care of convalescent neuromuscular disease with intensive training in functional anatomy, muscle testing, muscle reeducation and use of supportive and assistive apparatus. This course is complete in itself.

Course II—Three months duration with course I prerequisite. Emphasis on care of severe chronic physical handicaps with intensive training in resumption of functional activity and use of adaptive apparatus.

In-Service Training Program—Fifteen months duration at salary of \$225 per month plus full maintenance. This program includes training in course I and II.

Tuition: None. Maintenance is \$100 per month. For scholarship to cover transportation and maintenance for course I and II, contact National Foundation for Infantile Paralysis, Inc., 120 Broadway, New York 5, New York. (Scholarships require two years of experience).

For Further Information Contact:

ROBERT L. BENNETT, M.D.
Medical Director

Georgia Warm Springs Foundation
WARM SPRINGS, GEORGIA

NATIONALLY SPEAKING

From the President

The Medical Advisory Council of the AOTA has met. It is a pleasure to discuss with you in this brief space the essence of that meeting. We were delighted with the unanimous turnout and the sincerity with which the Council members considered our hopes and problems.

After a quick tour through the developmental highlights of occupational therapy, we settled into thought of today's needs. As I have discussed with you before, our mid-century emphasis in the growth of occupational therapy has been spearheaded in the directions of analysis, education and personnel. The Council's consideration in these three areas brought forth direct comment and advice.

Analysis. A statement of our clinical philosophies of occupational therapy in the five major areas was previously distributed for study. The scope of this concept was heartily supported in general which gives us medical assurance of our direction. It was evaluated to give us constructive comments. The following edited comments relate to our own analysis.

Growth in occupational therapy should:

Avoid tendency to compartmentalize too much. Underlying principles are common to all areas; the difference lies in emphasis.

Determine our clinical boundaries more surely so we can *co-exist* rather than *overlap* the fringe areas with other professional groups.

Avoid "diversional therapy." Reword the psychological value of OT into respectability.

Avoid setting down detailed specifics at the sacrifice of end results. Analysis is a method of clarifying thought to bring desired results into clearer focus.

Keep in the foreground the *team concept* of the treatment program.

Clarify the functions of OT to avoid falling down on procedures.

Interpret the local program and its possibilities to the doctors when better MD/OT relationships are needed. OT's are frequently unwilling to speak up in support of their program.

Encourage the check plan of prescription. It presupposes a good MD/OT understanding.

Seek medical guidance but freedom to work within a range to accomplish an objective.

These are not foreign thoughts but they are the Council's advice to us in relation to our own analysis.

Education. Critical review of the OT curriculum is in the wind. This is being supported by the education committee of AOTA itself, within the range of balanced vision. Let us be sure what is wanted in a "finished OT" and then alter the course to that goal as is indicated. Let us continue to hold to good principles of education.

The Council heard with interest of the educational material we have developed to date (Curriculum Guide, Clinical Directors Guide, Student Manual and Report Forms). They listened to our educational philosophies and expression of our problems. Their comments expressed the following viewpoints.

That the OT problem is no different from that in medical schools.

That well balanced basic training must be given at the undergraduate level.

That a broadly based curriculum in all areas is essential to the development of an effective specialist in any given area.

That the *OT Essentials* are heavily weighted in theory, a basic understanding of fundamentals is important.

That we should develop a more direct evaluation of our clinical affiliations and school personnel (clinical center accrediting study currently under way).

The Council was asked to think with us in this development. It expressed its interest in the OT educational program and its willingness to review with us any proposal for changes in the plan before submitting it to the American Medical Association for formal consideration.

Personnel. Though there are many personnel problems, that of the non-registered personnel came up before the Council. The doctors were extremely helpful in their frank discussion of the issue and recommended that some form of recognition or status be given non-professional personnel. In support of this recommendation the Board later placed implementation of the matter in the hands of a joint committee appointed from the House of Delegates and the education committee.

In conclusion, the Medical Advisory Council summarized its thoughts for us.

Occupational therapists and any of the auxiliary services should avoid limiting themselves to any one medical specialty. An over-all medical advisory group should be established to work with therapists and should be given ample opportunity to really function. It should be fully representative but small enough to be wieldy.

There should be more active direct assistance from the doctor to the therapist in carrying out treatment programs.

The performance of OT in pediatrics thus far has been limited. Interest was expressed in having more of this material put before the pediatricians.

Nothing should stand in the way of the direct patient-therapist relationship. There was some difference of opinion as to how wide a margin should be given to the therapist in certain phases of patient management.

The need of a central inspection board concerned with professional training policies was restated. Superficial inspection should be avoided and at least several days devoted to evaluation of a school and its clinical training centers.

(Continued on page 72)

PEOPLE YOU SHOULD KNOW



FRANCES L. SHUFF, M.A., O.T.R.

A Biographical Sketch
by
FLORENCE M. STATTEL, M.A., O.T.R.

Frances Shuff, assistant to the executive director of the American Occupational Therapy Association, comes to her position with a rich background in educational work and experience. A graduate of Skidmore College with a B.A., Frances shortly thereafter added "Mrs." to her name, marrying William Shuff. She has two daughters, Judith and Susan, both attractive and artistically inclined young women. When the girls started high school, Frankie (as she is known to her friends), found that her lectures on design at the Brooklyn Museum and her instructing in interpretive dancing did not provide sufficient depth or breadth to her life. Her plan to study occupational therapy was thoroughly approved by her husband, Bill, and she received her certificate in occupational therapy from New York University in 1946. The stimulating challenge of occupational therapy and the personal satisfaction which she derived were in accord with the wonderful philosophy of life which is hers. Her interest in people is sincere and genuine. She has an inexhaustible store of energy and wisdom which she combines and transmits to her friends and associates.

As assistant director of occupational therapy at Triboro Hospital, New York, and later as director of occupational therapy at the Jewish Sanitarium

and Hospital for Chronic Diseases in Brooklyn, she ran a dynamic program in occupational therapy. Her search for further knowledge that would aid her patients, staff and administration took her back to New York University and in 1954 she received her M.A.

"Frankie" Shuff is one of the rare women who can raise a family, be a devoted wife, work in the occupational therapy profession and do a splendid job in each area.

As past president of the New York Occupational Therapy Association and as an active member on AOTA committees, her interest has always been for high professional standards in occupational therapy.

In her position as assistant to the executive director, Frances Shuff's duties include the responsibility of getting out the Newsletter, the Year Book and conducting the book loan department. She maintains the national office placement service and helps represent the national office in the field of public relations at the executive director's request. When you visit the AOTA office and get acquainted with her, you will agree she is a fine representative of her profession.



ELOISE C. PARKER, O.T.R.

A Biographical Sketch
by
LUCILLE B. BOSS, M.A., O.T.R.

Eloise C. Parker, occupational therapist in pediatrics at the Lenox Hill Hospital, New York City, is well known for her unique playroom for children. In addition she has served as a member of the advisory committee of the American Toy Institute and the research division of the Toy Manufacturers of the U.S.A., Inc., since the inception of this committee.

A native of Ohio, Mrs. Parker received training as a kindergarten teacher in Cleveland and later attended the Wheelock School in Boston, Mass. Upon graduation she entered the field of occupational therapy under the able guidance of Ida F. Sands in Philadelphia and during the First World War served in a base hospital in that city.

During the next twenty years she had a rich and varied experience in occupational therapy at City Hospital, Cleveland, Ohio, Ridgely Sanitarium, Wickliffe, Ohio, Sigma Gamma Hospital School, Mt. Clemens, Mich., and Seaview Hospital, Staten Island, N. Y. On the day the Second World War was declared, she arrived at the U. S. Marine Hospital on Ellis Island as director of occupational therapy, where for the next few years she carried on a fine treatment program for service men in the U. S. Coast Guard and Merchant Marine. Since 1944 she has been connected with the occupational therapy department at Lenox Hill Hospital, and for the past five years has worked exclusively with children there, correlating her early kindergarten training with occupational therapy.

In March, Mrs. Parker will be on leave of absence to go to Sao Paulo, Brazil, in order to establish a program similar to the one she set up at Lenox Hill Hospital.

Mrs. Parker's sensitive and artistic nature, plus her gay sense of humor make her a delightful companion for both adults and children. Hobbies include creative writing, modelling in clay and finger painting. In addition she often designs as well as makes part of her smart wardrobe. Mrs. Parker is a frequent and enthusiastic attendant at the best performances New York City has to offer in the theater, and at dance recitals and concerts. A favorite summer interest is spending her vacations off the New England coast aboard a windjammer!

Nationally Speaking . . .

(Continued from page 70)

After an all-day session the stoic Council members attended the business meeting which opened the 37th annual conference of the American Occupational Therapy Association. They were presented to the membership and listened with surprising interest to the reports of the standing and special committees. This gave the doctors a panoramic view of the working power of our organization. Their subsequent letters to us have expressed their appreciation of our quality, sincerity and vigor in accomplishment. This is a compliment to any organization and I take pleasure in passing it on to you who have earned it.

We are most grateful to the members of the Medical Advisory Council for their considered in-

terest and their willingness to sit with us in council, and we look forward to subsequent meetings. We want to thank the medical specialty groups for appointing so effective a group of representatives. As you know, they are:

Dr. Alex M. Burgess, American College of Physicians

Dr. Leonard E. Evander, American College of Chest Physicians

Dr. H. R. McCarroll, American Academy of Orthopedic Surgeons

Dr. Ralph E. Moloshok, American Academy of Pediatrics

Dr. Robert S. Myers, American College of Surgeons

Dr. Donald L. Rose, American Congress of Physical Medicine and Rehabilitation

Dr. Benjamin Simon, American Psychiatric Association

Henrietta McNary, O.T.R.
President

SCHOLARSHIP AWARDS

The American Occupational Therapy Association is pleased to announce that the scholarship committee has awarded 61 United Cerebral Palsy tuition scholarships for the spring semester, 1955. These awards to occupational therapy students in 22 accredited schools total \$9,545.

The scholarship fund of \$15,000 was granted to the American Occupational Therapy Association by United Cerebral Palsy for basic training of undergraduate occupational therapy students during the academic year 1954-55. Tuition scholarships, totalling \$14,162, have been awarded to 88 of the 123 students who applied from 23 occupational therapy schools. Of these, 64 received full tuition and 24 received partial tuition for one semester. Eight of the recipients are in clinical affiliations, 23 are advanced standing students, 27 are seniors and 30 are juniors. The students come from 25 different states which are representative of all the geographical divisions of the United States.

The American Occupational Therapy Association is deeply appreciative of the financial support rendered by United Cerebral Palsy in initiating an undergraduate scholarship program in 1954. United Cerebral Palsy has been requested to consider the continuance of its support for the academic year 1955-56 since it is believed that such support is, and will continue to be, essential in order to encourage others to enter this professional field, help occupational therapy students meet the high costs of professional education and to partially support the increasing number of students requiring financial aid to complete their training.

Letters to the Editors

To the Editor:

I recently had the privilege of reading the editorial, concerning the lack of professional interest of occupational therapists in the field of mental retardation, appearing in the *American Journal of Occupational Therapy*, Vol. VIII, No. 6, 1954.

As the superintendent of a large institution devoted to the care and training of mentally deficient children, I am continually faced with the problem of finding trained therapists and particularly with need of developing their interest and techniques in handling the problems of the retarded child. We are located near a large university which operates a recognized occupational therapists training center, but have been unable to place their students in training here because of your national association limitation on training in this type of institution.

It seems to me that there is an immense field for therapists in all the phases of the training of retarded children, including institutional, city and state supported local classes and workshops, which your profession appears to be neglecting in the training sphere. I firmly feel that mental deficiency poses special problems particularly in attitudes and special techniques. In addition, our children represent problems in the other fields, including spastic, orthopedic, and pediatric problems and would therefore appear to represent the best single training field for your students. Many institutions, like ours, have adequate staffs of physicians in the fields of psychiatry, orthopedics, pediatrics, etc., who could be used in the training of student therapists.

Sincerely,
W. A. Butcher, M.D.
Superintendent
Columbus State School
Columbus, Ohio.

NEW COURSE

The occupational therapy department at the University of Pennsylvania is announcing a new course entitled "Principles of Rehabilitation—Orientation in Rehabilitation Practice" which will be offered Monday through Friday on April 18, May 16, June 13 and July 18. Registration will be limited to twenty-five persons per course in order to foster student participation.

There is no tuition fee as the cost will be covered by a grant from the Office of Vocational Rehabilitation, U. S. Department of Health, Education and Welfare.

Stipends are available for eligible persons and further information may be obtained from:

Rehabilitation Center
Hospital of the University of Pennsylvania
Philadelphia 4, Pa.

Conference News

Plans for the 38th annual occupational therapy conference to be held in San Francisco, California, October 22 to 27, are well underway and we hope you are making plans now to attend. This is your opportunity to combine both business and pleasure, for San Francisco is known the world over for its beauty, individual charm and cosmopolitan atmosphere. It is a city of gourmets and internationally famous restaurants, outdoor flower stands, smart shops and clanging cable cars; a city built on hills, where each climb is rewarded by a panoramic view. In short, for those who have never been to San Francisco, it offers variety to suit every taste (gastronomically, esthetically and intellectually). And those who

have been there in the past will certainly want to return to the city by the Golden Gate.

To help you enjoy your visit, we are planning a Bay cruise where, for a few hours, you can relax and feel the tang of salt air while seeing the sights around the Bay, the largest landlocked harbor in the world. Several field trips to various sections of the area are also scheduled which will offer you not only an opportunity to visit various OT departments, but also a chance to see some of the countryside as well.

The convention itself will be in the famous Sheraton-Palace Hotel, located in downtown San Francisco and noted for its fine foods and outstanding service. We are offering a varied program in the fields of pediatrics, neurology and orthopedics, as well as cerebral palsy, geriatrics and psychiatry. There will be a panel discussion on prescriptions by doctors and therapists from varied fields of medicine. And a section on international news, with reports from therapists who have been working in foreign countries.

Remember the dates—October 22 to 27—and plan now to be at the San Francisco conference.

Calendar of Events

April 23-29, 1955

Industrial Health Conference
Memorial Auditorium
Buffalo New York

April 25-29

Occupational Therapy Institute
of the American Hospital Association
Drake Hotel
Philadelphia, Pennsylvania

June 20-24, 1955

Annual Conference of the
American Physical Therapy Association
Hotel Jefferson
St. Louis, Missouri

October 10-12, 1955

Annual Meeting of the
American Academy for Cerebral Palsy
Claridge Hotel
Memphis, Tennessee

October 22-28, 1955

Annual Conference of the
American Occupational Therapy Association
Sheraton-Palace Hotel
San Francisco, California

March 25-31, 1957

Inter-American Congress of the
Pan American Medical Association
Mexico City, Mexico

DELEGATES DIVISION

DISTRICT OF COLUMBIA

Alternate Delegate-Reporter, Rena Graham, O.T.R.

This past year has been a very busy and interesting one for the District of Columbia Occupational Therapy Association. Our efforts were combined with the Maryland and Virginia Associations in planning and administering the 1954 American Occupational Therapy Association conference. Though we all worked hard to insure its success, we agreed that it was a most profitable experience, and felt well rewarded by the total registration of over 1,000. Our thanks go to our chairman, Miss Mary Beach, and co-chairman, Mrs. Arvilla Merrill, for their devoted guidance.

During the year we had eight very interesting and well planned meetings at various hospitals in the area. Of these, our visit to the new Clinical Center, National Institutes of Health in Bethesda, Maryland, was perhaps the most outstanding. This visit included not only an illustrated talk by Dr. John Trautman, director of the Clinical Center, but a very complete tour of the Center. It is interesting to note that the National Institutes of Health, of which this Center is a part, is the research bureau of the Public Health Service and includes seven research institutes.

Although we expect 1955 to be a somewhat quieter year for us, we are looking forward to many interesting meetings with our new officers.

OFFICERS

President.....Tommye Jean Duncan, O.T.R.
Vice-President.....Margaret Danley, O.T.R.
Secretary.....Katherine Pitchford, O.T.R.
Treasurer.....Elizabeth Nachod, Capt., WMSC (OT)
Alternate Delegate.....Rena Graham, O.T.R.

OHIO

Delegate-Reporter, Marguerite McDonald, O.T.R.

The Ohio Occupational Therapy Association is comprised of four districts, centered around four major cities, Cleveland, Columbus, Dayton and Cincinnati. We are all eagerly awaiting the decision of the American Occupational Therapy Association, regarding districts.

Each district holds monthly meetings or as often as is feasible in their area. The entire state membership convenes for an annual two-day conference and business meeting, with one district serving as host. The executive board of the state association meets twice each year to better coordinate the plans for the district groups. The executive board is comprised of the elected officers, state committee chairmen and the chairman of each district. The district committee appointees serve with their corresponding state committee chairman to make up the membership of the state committees. The vice-president has the additional responsibility of serving as the program consultant for the annual state meeting.

Several new projects have been undertaken to bring the districts closer together and to promote occupational therapy.

1. A bi-annual newsletter has been established to report on conferences, promote recruitment, to relay information on activities of the districts, to give information regarding job opportunities, and to welcome new therapists into the state.

2. State and district ways and means committees have been established to supplement the membership fees in the treasury. Each district has executed plans such as bridge

parties, white elephant sales, Christmas gift exchanges and printing projects; the major statewide project being a printed bookplate for sale to the state and national membership. This money has been used to provide scholarships for occupational therapy students at Ohio State University, and to pay for the expenses of the delegate and alternate delegate to attend the national conference.

3. The membership committee has been active in attracting new members, in establishing district boundaries and in working out a plan to coordinate the collection of dues for the district and state membership.

4. We have renewed our policy regarding advisors and each district has invited various professional people from their community to work with us, with each district providing one advisor for the state association.

5. We have been active in publicity and recruitment with many members appearing on radio and television; reading papers or appearing on panels with other professional groups; serving on inter-professional committees; and in planned programs and entertainments for high school groups. An international feature was introduced by one district by packing a box of warm clothing to be sent to Korea.

The Ohio Occupational Therapy Association continues to increase its membership, and to progress in its planning for the future.

OFFICERS

President.....Walter Titman, O.T.R.
Vice-President.....Mildred Schwagmeyer, O.T.R.
Secretary (pro tem).....Mildred Schwagmeyer, O.T.R.
Treasurer.....William Rabucha, O.T.R.
Delegate.....Marguerite McDonald, O.T.R.
Alternate Delegate.....Mrs. Irene Jamison, O.T.R.

ROCHESTER (NEW YORK)

Alternate Delegate-Reporter, Wilma L. West, O.T.R.

At the 1954 AOTA conference last October, the Rochester Occupational Therapy Association was recognized as the 37th group affiliating with the national organization.

Underlying the establishment of this association is the purpose which no doubt stimulated the development of all other state groups; namely, the desire to provide the structure and medium through which professional meetings and educational programs might be arranged for mutual exchange and benefit. Through the winter months of 1953-54, therefore, a group in this area met regularly to formulate a constitution and by-laws, solicit members, elect temporary officers and hold occasional meetings. The success of this venture has been attested by the consistently regular attendance of a small but interested group at such meetings as have been planned, by prompt recognition from national, including seating of our delegate at the October conference, and—our highest honor—by election of our delegate, Frances Helmig, as the new speaker of the House of Delegates.

Our original membership invitation list was extensive because it was our desire at the outset to welcome all OT's in the state who were not affiliated with the previously existing New York Association. Since that group draws its members largely from the metropolitan and "down-state" area, we hope to interest "upstate" New York OT's by holding occasional meetings in cities other than Rochester where there is at least a nucleus of professional personnel. From a potential membership of some 100 names, we now have approximately 20 active members and hope to increase this number in the coming year.

Plans for 1955 include meetings with the Rochester District of the New York chapter of the American Physical Therapy Association, efforts to spur recruitment for the newly-organized OT school at the nearby University of

Buffalo, and financing our delegate's expenses to the '55 conference in San Francisco.

OFFICERS

President.....Mary Rex, O.T.R.
Vice-President.....Wilma L. West, O.T.R.
Secretary.....Arlene Van Derhoef, O.T.R.
Treasurer.....Ruth Nightingale, O.T.R.
Delegate.....Frances Helmig, O.T.R.
Alternate Delegate.....Wilma L. West, O.T.R.

TEXAS

Delegate-Reporter, Martha Parr, O.T.R.

The year 1954 has been a year of "calm after the storm," the storm being the AOTA annual conference in Houston, one "storm" which all of us in Texas enjoyed very much.

The 19th annual conference of the TOTA was held in Fort Worth the latter part of May. Eighty-six persons attended the conference of which 59 were OTR's. The program was very varied and included many interesting facts concerning psychiatry, use of hand splints, problems encountered in training students, etc.

One highlight of the year was the presentation of the Superior Service Award to Lenore Brannon, O.T.R., state historian for TOTA, by Oveta Culp Hobby, secretary of the Department of Health, Education and Welfare, for distinguished service in the field of occupational therapy. This was presented to Miss Brannon in Washington, D. C., on April 9th.

The scholarship committee has awarded two \$250.00 scholarships to students, and has \$250.00 in the fund to be presented to another student. OT's throughout the state are being asked to contact people who might make gifts for OT scholarships.

The TOTA now has 70 active, 27 state, three student, and five associate members making a total of 105 members.

OFFICERS

President.....Dorothy Sniffin, O.T.R.
Vice-President.....Myra McDaniel, Major, WMSC (OT)
Secretary.....Irene Greer, O.T.R.
Treasurer.....Mrs. Dorothy Hines, O.T.R.
Delegate.....Martha Parr, O.T.R.
Alternate Delegate.....Mrs. Lucie L. Lacy, O.T.R.

WISCONSIN

Delegate-Reporter, Marion N. Hartman, O.T.R.

Meetings for the year 1953-54 began with a tour of the Milwaukee Art Institute's "Medicine in Art" show. This included the popular "Art in Therapy" exhibit assembled by Henrietta McNary and hung with the aid of WOTA members.

Our traditional "members' talents" bazaar was again revived after experimenting with less successful money-raising ventures. During the year, emphasis was given to recruitment and public relations. Broader participation in the Kiwanis-Milwaukee Community Welfare Council career programs for high schools was made possible with the cooperation of clinical training students. Informative pages on occupational therapy were prepared for directories of the Community Welfare Councils of Milwaukee and Dane counties. Members helped the Wisconsin Anti-Tuberculosis Association in preparing the May CRUSADER, featuring occupational therapy. Portfolios for high school guidance counsellors are being made up.

We have been working on expediting the business of our executive board through more specific statement of duties and the establishment of standard operating procedures. We are continuing to seek solutions for our problem of greater participation in the affairs of the association by occupational therapists throughout the state of Wisconsin.

OFFICERS

President.....Dorothy Bleyer, O.T.R.
Vice-President.....Dorothy Lauson, O.T.R.
Secretary.....Joan Downey, O.T.R.
Treasurer.....Mary Bonness, O.T.R.
Delegate.....Mrs. Marion N. Hartman, O.T.R.
Alternate delegate.....Mrs. Marion Thill, O.T.R.

REQUIREMENTS FOR OCCUPATIONAL THERAPISTS ESTABLISHED BY THE UNITED STATES CIVIL SERVICE COMMISSION*

Section 24.122. Occupational Therapist, GS-631-0 (all grades)

(a) Educational requirement. Applicants must be graduates of a school of occupational therapy approved at the time of graduation by the Council on Medical Education and Hospitals of the American Medical Association. Applicants who graduated prior to 1938 must be graduates of a school of occupational therapy approved at the time of their graduation by the American Occupational Therapy Association.

(b) Duties. With duties varying in responsibility in accordance with grade, occupational therapists under general supervision of a medical officer follow accepted theories and practices for definitive therapeutic purposes to give treatment to patients for disease or injury, whether physical or mental, by the scientific use of remedial activities such as machine and hand crafts properly selected and adapted to provide restoration of muscle function and joint motion, improved work tolerance, relief from mental and emotional strain, and motivation back to normal life as a useful member of society.

(c) Knowledge and training requisite for the performance of duties. Occupational therapists must have a knowledge of the sciences such as anatomy, physiology, neurology, psychiatry, psychology, sociology, and child growth and development; a knowledge of clinical subjects covering general medical and surgical conditions, orthopedics, psychiatric, pediatric, tuberculosis and cardiac diseases; theory courses interpreting the principles and practices of occupational therapy in pediatrics, psychiatry, tuberculosis, orthopedics and general medicine and surgery. He must be able to perform disability evaluations including joint measurement, locomotion, and functional testing. He must be able to recognize the connotation of the diagnosis so that limitations of the physical condition of the patient can be related to the treatment program. He must have a scientific knowledge of the use of occupational therapy equipment and be able to plan for and/or construct specific equipment adaptations to meet the specific patient needs. He must be able to anticipate and to recognize changes in the patient's physical or emotional condition and be able to make immediate adjustments in the treatment program. He must also have the ability to perform tests for the evaluation of the developmental level, handedness, attention span, and activity tolerance. The necessary knowledges and training can only be acquired through a directed course of study in an approved occupational therapy school.

*Reprinted from the "Federal Register," Part 24, Title 5, of the Code of Federal Regulations, January 13, 1955.

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Proprioceptive Facilitation . . .

(Continued from page 58)

bellar facilitation will not be entirely clear until further objective studies are made.

Bilateral facilitation. This technique is easily applied by having the patient exercise with both extremities instead of one. As reported by Kabat, it is usually used in connection with mass movement patterns. He reports that the weaker of the two extremities will show a stronger response with the use of bilateral patterns.²⁵ The physiological basis for this was described in Part I.

Extensor thrust. This reflex is more than just primitive or mass pattern of action. It is a distinct reflex, as explained in the previous chapter. Both Kabat and Newman have demonstrated the use of the extensor thrust as a facilitating mechanism to all of the extending muscles in the upper extremities.^{25, 40}

Grasp reflex and instinctive grasp response. There is very little published data on the use of automatic grasp as a treatment media. This possibly may be due to the fact that its use has not been recognized.

Long term value of proprioceptive facilitation. Although it is now fairly clear how immediate and temporary facilitation is achieved, it is harder to understand how this effect becomes permanent. Kabat feels it is achieved by repetition of the proprioceptive facilitation techniques which produce a permanent reduction of synaptic resistance and develop functional central pathways.²⁶ Gellhorn feels that it is essentially a kind of training, as in the establishment of conditioned reflexes or the training of motor skills.¹⁵

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Aphasic Patients . . .

(Continued from page 64)

the occupational therapist has been suggested as a logical person to do speech retraining in the absence of speech personnel.

It is an accepted fact that speech retraining should be initiated for this type of patient as soon as the acute phase of injury has passed. If this is not done, the aphasia patient because of his inability to communicate becomes maladjusted both personally and psychologically. A positive approach to the language formulation difficulties must be made to prevent the development of asocial tendencies.

The proposed role of the occupational therapist in the reeducation program anticipates aiding the patient until such time as specialized professional care by the speech therapist is available. It is not proposed that occupational therapy be a panacea for the numerous difficulties confronting the aphasic. It is proposed that the therapist alleviate the personal and psychological trauma dealt to an individual who cannot communicate in a normal manner with the world about him.

Hand Splints . . .

(Continued from page 62)

dividual to utilize to the utmost the remaining muscle power and function. In some, this may be the palmar prehension grip; in others, the lateral prehension may have to be encouraged. It is important to select the simplest type of splint that will provide the maximal function to the hand. It is also obvious that in most cases with severe involvement intensive supervised intelligent training is needed if we are to obtain the maximal return of strength and function. The patient must be aware of the action of the muscle group and

(Continued on page 79)

Schools Offering Courses in Occupational Therapy

- Boston School of Occupational Therapy, Affiliated with Tufts College, 7 Harcourt St., Boston, Mass. *Mrs. John A. Greene, President*
- Colorado Agricultural and Mechanical College, Fort Collins, Col. *Asst. Prof. Marjorie Ball, OTR, Director of O.T.*
- Columbia University, College of Physicians and Surgeons, 630 W. 168th St., New York 32, N. Y. *Ass't. Prof. Marie Louise Franciscus, OTR, Director of Training Courses in O.T.*
- Illinois, University of, College of Medicine, 1853 West Polk St., Chicago 12, Ill. *Assoc. Prof. Beatrice D. Wade, OTR, Director of O.T.*
- Iowa State, University of, College of Liberal Arts and College of Medicine, Iowa City, Iowa. *Ass't. Prof. Elizabeth Collins, OTR, O.T. Supervisor.*
- Kalamazoo School of Occupational Therapy, Western Michigan College of Education, Kalamazoo 45, Michigan. *Assoc. Prof. Marion Spear, O.T.R., Director of O.T.*
- Kansas, University of, School of Occupational Therapy, Lawrence, Kansas. *Asst. Prof. Frieda Drohobitch, OTR, Director of O.T.*
- Michigan State Normal College, Ypsilanti, Michigan, *Asst. Prof. Frances Herrick, OTR, Director of O.T.*
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- Minnesota, University of, School of Medicine, Minneapolis, Minn. *Miss Borghild Hansen, OTR, Director of O.T.*
- Mount Mary College, Milwaukee 13, Wis. *Sister Mary Arthur, OTR, Director of O.T.*
- New Hampshire, University of, College of Liberal Arts, Durham, N. H. *Miss Ruth McDonald, OTR, Supervisor of O.T.*
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Awaiting accreditation:

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- North Dakota, University of, Grand Forks, N. D. *Asst. Prof. Ione Olson, OTR, Director of O.T.*

Hand Splints . . .

(Continued from page 77)

he must think about it as he performs the motion. This co-ordination must be taught; and to insure continued co-ordination, activities that are too difficult should not be attempted at first.

There are many other factors which have to be considered in selecting splints for hands. In evaluating the needs of the patient, which has to be done individually, consideration should be given to the total involvement, duration of the disability, amount and severity of contractures and to the general intelligence and psychological behavior. Once all these factors are evaluated in proper light and an adequate brace or splint is provided, then the rehabilitation of the patient progresses much faster with better results.

SUMMARY

Basic principles of prescribing braces for hands were discussed. Emphasis was placed on the necessity of a thorough knowledge of normal function of hands and the normal disabilities that affect them.

Various braces have been presented.

Medical Supervision . . .

(Continued from page 56)

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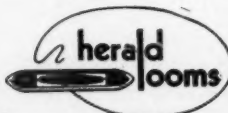
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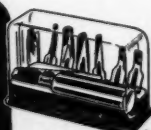
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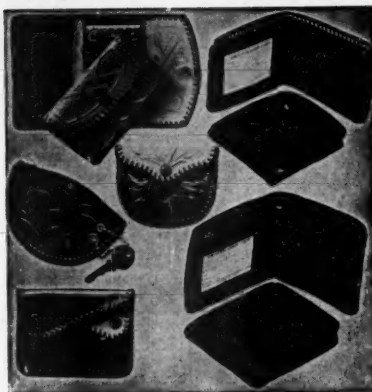




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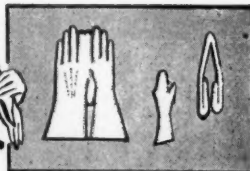
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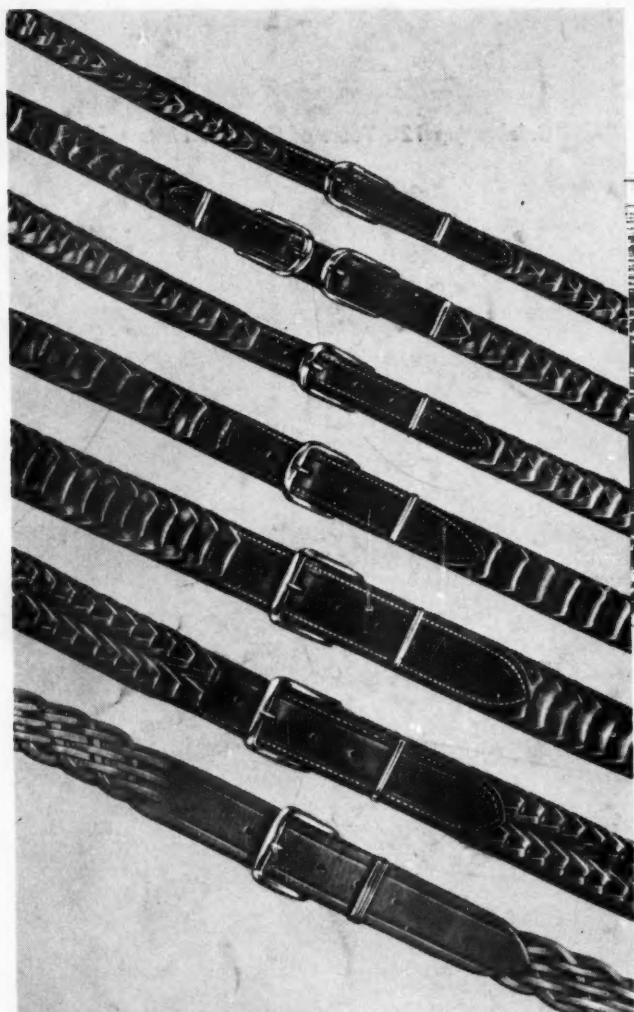
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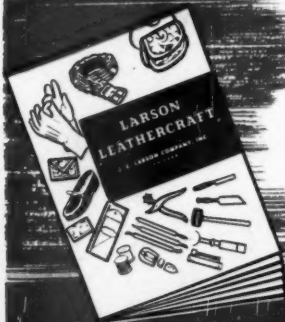
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